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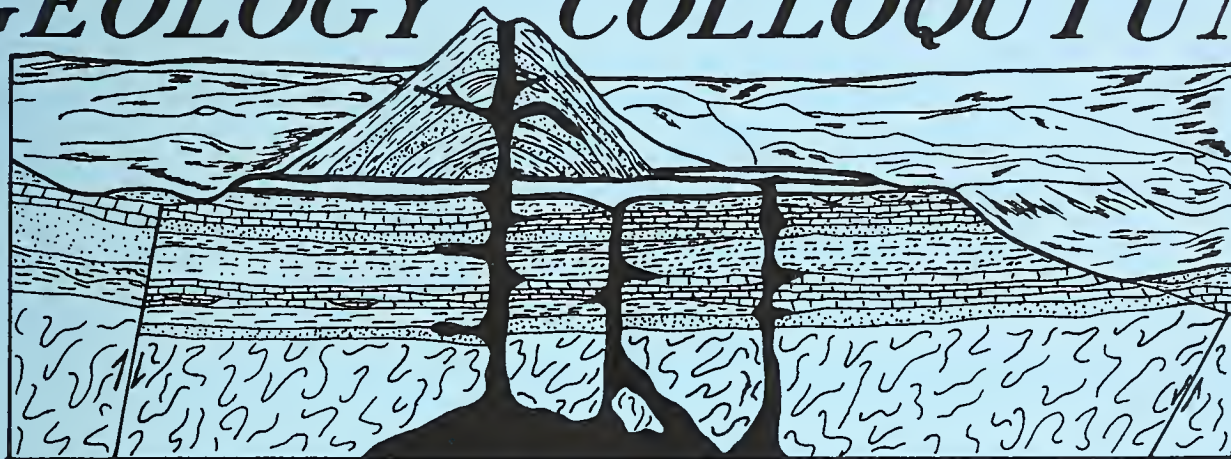
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TWENTY-SIXTH  
ANNUAL NEWSLETTER

*GEOLOGY COLLOQUIUM*



DEPARTMENT OF GEOLOGY

UNIVERSITY OF ILLINOIS  
at  
Urbana-Champaign

1980-81





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1980 - 85

Geology

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September 1981

Dear Alumni and Friends:

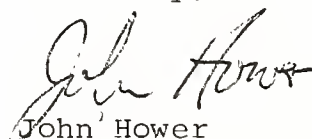
This may be as reliable as a switchboard poll at the White House, but everyone who has commented prefers having gone back to the old format for the Newsletter. Let us know what you think - but most of all, please send in news about yourselves. Just about everyone agrees that the most interesting part of the Newsletter is the Alumni News section - where you can find out what former fellow students are doing now. We put in all the alumni news we receive, but the bulk of the Newsletter must be composed of everything the department and its staff did last year. That's appropriate, of course -- but we need alumni news.

The most important thing that has happened to the department in the past year is the formation of the Ralph E. Grim Chair in Geology, which you will read about in the Newsletter. As with other geology departments, our staff seems to have a high vapor pressure. Dennis Wood resigned to work for Robertson Research in England, Dennis Eberl is now with the USGS, and Les Fruth and Bill Goodman (former business manager) resigned to work for Fed Donath's consulting company.

Wang-Ping Chen, who received his Ph.D. from MIT, joined the faculty as an Assistant Professor this fall. Dr. Chen is a seismologist whose research interest is in the structure of the continental crust and will be teaching graduate courses in seismology. Cameron Begg, who is presently at Edinburgh University, will arrive in the late fall as Research Associate. We are looking hard for a structural geologist to take Dennis Wood's place. Pat Lane joined the department as Departmental Secretary last spring and also serves as editor of the Newsletter.

Support of the department by oil companies, which had dwindled to a very low amount in the 70's, is picking up again - as described on later pages. That, along with increased research funding (mainly from the National Science Foundation), is helping to make up for the reduced internal resources of the University. We hope both those sources will continue to go up in the future.

Sincerely,



John Hower  
Professor and Head

September 1981

Dear Alumni:

Before greeting you as the editor of the 26th Annual Newsletter, I must introduce myself. My name is Pat Lane and I joined the staff at Geology as Department Secretary in April of this year. I came to Geology after working for the Civil Engineering Department for five years and the American Water Resources Association prior to coming to the University. I worked as an assistant editor while at AWRA but have found the editorship of the Alumni Newsletter a real challenge.

I wish to express my appreciation to the staff: Juanita Foster, Murle Edwards, Myrna Goering, Laura Harbison and Carol Sanderson who have helped me collect and type the information, and to the faculty for their interest and cooperation. Dr. George White deserves special mention for his continuing efforts to see to it that I am supplied with up to date information about our Alumni.

You will note that we received a number of responses to last year's request for information about where you are and what you are doing. We are again asking that you send information about yourself for next years issue of the Newsletter and are providing a self addressed form for you to use on the last page of this Newsletter for that purpose. We are planning an Alumni Directory as a separate publication this year so please get address changes in promptly so our directory will be as current as possible.

Your comments and suggestions for making next years Newsletter what you want it to be will be welcomed. I hope to be a long term member of the Geology Department staff and I look forward to hearing from you often in the years to come.

Sincerely,

*Patricia Lane*

Patricia Lane  
Newsletter Editor



## 1981-82 FACULTY AND STAFF

### FACULTY

- DAVID E. ANDERSON (PhD, Sydney) - Metamorphic and theoretical petrology  
[1967-Present]
- THOMAS F. ANDERSON (PhD, Columbia) - Stable isotope geochemistry;  
oceanography [1967-Present]
- DANIEL B. BLAKE (PhD, California-Berkeley) - Invertebrate paleontology;  
biostratigraphy [1967-Present]
- ALBERT V. CAROZZI (PhD, Geneva) - Sedimentology; sedimentary petrology;  
petroleum geology [1955-Present]
- WANG-PING CHEN (PhD, M.I.T.) - Solid earth geophysics [1981]
- PATRICK A. DOMENICO (PhD, Nevada) - Hydrogeology [1968-Present]
- DONALD L. GRAF (PhD, Columbia) - Sedimentary geochemistry; mineralogy  
[1969-Present]
- DONALD M. HENDERSON (PhD, Harvard) - Mineralogy; crystallography  
[1948-Present]
- JON T. HOLDER (PhD, Illinois) - Geophysics and solid state geophysics  
[1969-Present]
- JOHN HOWER (PhD, Washington-St. Louis) - Diagenesis; clay mineralogy  
[1978-Present]
- ALBERT T. HSUI (PhD, Cornell) - Geophysics, mathematical modeling,  
geodynamics and planetary interiors [1980-Present]
- W. HILTON JOHNSON (PhD, Illinois) - Quaternary stratigraphy; glacial  
geology; geomorphology [1958-Present]
- R. JAMES KIRKPATRICK (PhD, Illinois) - Igneous and experimental petrology  
[1978-Present]
- GEORGE deVRIES KLEIN (PhD, Yale) - Sedimentology; marine geology; sandstone  
petrology and diagenesis; petroleum geology of clastic reservoirs  
[1970-Present]
- RALPH L. LANGENHEIM, JR. (PhD, Minnesota) - Stratigraphy; paleontology;  
field geology; geology of energy, coal [1959-Present]
- C. JOHN MANN (PhD, Wisconsin) - Mathematical geology; stratigraphy  
[1965-Present]
- ALBERTO S. NEITO (PhD, Illinois) - Engineering geology; applied rock  
mechanics [1974-present]
- V. VICTOR PALCIAUSKAS (PhD, Illinois) - Theoretical geophysics; transport  
processes [1969-Present]
- PHILIP A. SANDBERG (PhD, Stockholm) - Carbonate sedimentology; micro-  
paleontology [1965-Present]

ADJUNCT FACULTY

LEON F. FOLLMER (PhD, Illinois) - Paleopedology, soil geomorphology,  
quaternary geology [Illinois State Geological Survey, Urbana]

JAMES E. KING (PhD, Arizona) - Quaternary palynology and paleoecology  
[Illinois State Museum, Springfield]

JACK A. SIMON (MS, Illinois) - Coal geology [Chief, Illinois State  
Geological Survey, Urbana]

RESEARCH ASSOCIATES

DAVID B. BIELER (AM [Geology], Dartmouth) - Structural geology

JEFFREY TURNER (Ph.D. Flinders Univ. - Isotope methods

LINDA M. WESTGATE (BS [Chemistry], Missouri) - Mass spectrometry

EMERITUS FACULTY

CARLETON A. CHAPMAN

ARTHUR F. HAGNER

HAROLD W. SCOTT

RALPH E. GRIM

GEORGE W. WHITE

ACADEMIC OFFICE

PATRICIA J. LANE - Department Secretary  
and Editor

CAROL SANDERSON - Secretary-Transcribing

LAURA HARBISON - Clerk-Typist III

KAROLYN ROBERTS - Clerk-Typist III

BUSINESS OFFICE

CHARLES W. UHL - Assistant  
to Head

MURLE EDWARDS - Chief Clerk

MYRNA GOERING - Clerk-Typist III

TECHNICAL STAFF

JOHN F. BAUERLE - Instrument Maker and Shop Supervisor

CAMERON BEGG - Microprobe Analyst

DONALD D. DODSON - Instrument Maker

DAVID R. PHILLIPS - Cartographer

JACK O. PULLEN - Physical Science Technician

1981-82 COMMITTEES

ADMISSIONS: R. J. Kirkpatrick (Chm.), P. A. Sandberg, G. deV. Klein,  
D. M. Henderson (ex of.)

ADVISORY: W. H. Johnson, D. B. Blake, R. J. Kirkpatrick

COLLOQUIUM: T. F. Anderson

COURSES & CURRICULA: D. B. Blake (Chm.), R. J. Kirkpatrick, W. H. Johnson,  
C. J. Mann, P. A. Sandberg, D. M. Henderson (ex of.)

GRADUATE: D. L. Graf (Chm.), A. V. Carozzi, V. V. Palciauskas, A. T. Hsui,  
D. M. Henderson (ex of.)

LIBRARY: A. V. Carozzi (Chm.), D. L. Graf, A. T. Hsui, R. L. Langenheim

PLACEMENT: C. J. Mann

TECHNICAL SERVICES: P. A. Sandberg, D. E. Anderson, T. F. Anderson,  
C. W. Uhl (ex of.)

UNDERGRADUATE: W. J. Johnson (Chm.), A. S. Nieto, V. V. Palciauskas,  
D. M. Henderson (ex of.)

## FACULTY PROFILES

### Thomas F. Anderson, Associate Professor

Dr. Anderson together with his graduate students and research associates continues to be actively involved in the application of stable isotope variations. New data on sulfur isotope variations in Illinois coals have provided a new perspective to the timing and compacting mechanisms for sulfur incorporation. These studies are currently being extended to the low-sulfur coals of the Rocky Mountain Region. Ongoing isotopic and mineralogical studies have refined our ideas regarding the origin of permineralized peat zones ("coal balls") in Pennsylvanian coals. The collaborative project with Dr. Philip A. Sandberg on the preservation and diagenesis of constituents in limestones has begun to yield some impressive results on the nature of Paleozoic oceans and mechanisms of carbonate stabilization. In addition, investigations are continuing on oxygen isotope variations in Alaskan permafrost and glaciers (in collaboration with Dr. Daniel E. Lawson, Ph. D., 1977, now at the U. S. Army Cold Regions Research and Engineering Laboratory) and on the isotopic record of deep-sea calcareous nannoflora (with Dr. John C. Steinmetz, B.S., 1969; M.S., 1975, now at the University of South Florida).

Dr. Anderson authored or co-authored a number of journal articles and papers presented at national scientific meetings this past year. He was invited to present the preliminary results of his coal research and to participate in setting research objectives at the Coal Advisory Committee meeting of the Illinois Mining and Mineral Resources Research Institute. Dr. Anderson was appointed by the National Science Foundation to serve on the 1981 NATO Postdoctoral Fellow selection committee.

### David E. Anderson, Associate Professor

Dr. Anderson spent most of his sabbatical leave last fall at the University of Edinburgh. Much of the time was spent on continuing work on compositional zoning in metamorphic garnets from Western Scotland. It is now increasingly possible to read back from the textural and chemical zoning in the garnets the relationship between metamorphic and tectonic events in the complex evolution of the Grenville-Caledonian fold belt. This work has also raised a very interesting question about the lack of equilibrium between the garnets and the matrix minerals in the schists.

The sabbatical leave was completed by a short visit in early 1981 to a number of Universities in Australia.

A flood of new data on diffusion in aqueous electrolytes (collected by D. G. Miller at Lawrence-Livermore Lab. and partially funded by grants held by D. L. Graf and D. E. Anderson) has allowed extensive testing of existing and new models for estimating diffusion coefficients in complex natural fluids to continue.



David B. Bieler, Visiting Lecturer

Mr. Bieler is involved in several research projects. Of primary importance is completing his dissertation on the regional geology of part of Anglesey in North Wales. Tangents from this work that are being pursued are the mechanics of olistostromes, pressure-temperature paths in glaucophanic rocks, and mega-think about Late Precambrian and Lower Paleozoic tectonics in the North Atlantic region.

He has been teaching at the Wyoming field camp for the past two summers and is planning to return this summer. In connection with the field camp he is working on the structure of the transition between the north block and the middle block of the Big Horn Mountains and geology of the Woodchuck Pass area in the Precambrian of the Big Horns.

Mr. Bieler is teaching structural geology this fall while the search is continuing for a permanent staff member. The class will be taking to the field for a weekend in October and will be mapping the various structures in the Baraboo region.

Daniel B. Blake, Professor

Dr. Blake is continuing his research on the history of starfishes. Several papers were published recently, and he presented a talk on post-Paleozoic asteroids at The Paleontological Society's Short Course on Echinoderms at the GSA meetings in Atlanta. With support from the National Science Foundation, he plans to spend sabbatical time continuing his studies on starfish at a number of museums in the United States and Europe. He also continues his work on fossil bryozoans, and this year will discuss Paleoeology of Bryozoans at the Short Course on Lophophorates (brachiopods and bryozoans) at the GSA meetings at Cincinnati.

Tom Guensburg completed his PhD under Dr. Blake's direction; Tom studied an important and unusually well preserved echinoderm fauna from Tennessee. He has gone to work in the oil industry in Denver. Ed Snyder hopes to complete his dissertation on Mississippian bryozoans this fall. Other students are working on projects in Illinois paleontology and geology.

Albert V. Carozzi, Professor

Besides teaching and the supervision of many graduate students both years were fully occupied by consulting activities in Argentina and Brazil; the work in Argentina is on behalf of the national oil company, Yacimientos Petroliferos Fiscales, and consists of the setting up and supervision of several exploration projects in carbonate and clastic sedimentation in the Lower Cretaceous of the Neuquén Basin; the re-interpretation of the producing carbonates of the major oil field in Argentina Loma La Lata; giving short courses and organizing the first Latin-American Carbonate Rock Symposium to be held in September 1981 in San Luis in conjunction with the Annual Congress of the Geological Society of Argentina. The activities in the Loma La Lata field paid off handsomely on May 29, 1981 when well 89 erupted and went out of control, fortunately without fire. It produced the first day 10,000 barrels and since has produced more than 150,000 barrels.

The work in Brazil on behalf of PETROBRÁS consisted in 1980 in the teaching for 2 1/2 months at the training center in Salvador, Bahia, courses on sedimentology, basin evaluation and philosophy of research. In 1981 a new project began at the Research Center in Rio de Janeiro on the carbonates and evaporites of the Middle Cretaceous of the Espírito Santo Basin with particular emphasis on problems of migration and porosity generation related to the several types of crudes encountered in that sequence.

The Director General of PETROBRÁS, Dr. Carlos Walter M. Campos and his staff visited the Department June 7-10 to meet their graduate students Renato T. Bertani and Breno Wolff and discuss further applications of the High Pressure Equipment that PETROBRÁS is in part supporting financially as well as the scheduling of new graduate students from Brazil.

Carleton A. Chapman, Professor Emeritus

My wife and I spent much of the summer in New England. Part of July was devoted to field work (with Dick Gilman, Professor of Geology at SUNY, Fredonia, N. Y.) in the Mount Desert and Bar Harbor quadrangles, as part of a larger project sponsored by the Maine State Geological Survey.

In August the Chapmans took a ten-day auto trip to the Maritime Provinces of Canada to see some of the geology and scenery. Here they toured the Gaspé Peninsula, Prince Edward Island, and New Brunswick.

Wang-Ping Chen, Assistant Professor

Dr. Chen, a solid earth geophysicist, joined the Department in September, 1981. His main research interests are seismology and large scale tectonics. A modest laboratory for earthquake seismology is being planned and will be set up soon. He is currently engaged in the following research activities: (1) Focal depth distribution of inter-plate earthquakes and its relationship to the thermal-mechanical properties of the lithosphere. This is a global study for all tectonic settings. (2) A broad-band ( $\sim 0.01$  to 1 Hz) study of the source mechanism of selected continental earthquakes, including the Southern Illinois earthquake of November 9, 1968. (3) Detailed study of some large earthquake sequences in central Asia. These are some of the most devastating events that ever occurred. Surface breaks at the fault zones for some of these events can reach a length of several hundred km with displacements of up to 10 meters.

Just before arriving in the Land of Lincoln, he was invited to present a paper entitled "Seismicity and Mountain Building" (co-authored with Peter Molnar) at the Symposium on Mountain Building in Switzerland in honor of two famous European geologists, R. Trümpy and A. Ganssa for their 60th and 70th birthdays, respectively. These two fellows led the field trips which followed the meetings in the Swiss Alps. During the field trip, the entire group was caught by a surprising July snow near the Julia pass.

Patrick A. Domenico, Professor

Pat Domenico was named the 1980 recipient of the Alexander Winchell Distinguished Alumni Award given by the Department of Geology at Syracuse University in recognition of contributions in the field of hydrogeology and education. He is the current (1981-82) GSA sponsored Birdsall Distinguished Lecturer in Hydrogeology and will give lectures at several universities in the northeast (1981) and the southeast (1982). Domenico has presented an invited talk on pore pressures in thermal environments at Phillips Petroleum, Bartlesville, and is still an active member of overview committees for radioactive waste disposal in both Nevada and Washington. He has taken a sabbatical leave for the fall semester to further his studies on the mechanical and fluid pressure response of saturated sediments to thermal loading.

Donald L. Graf, Professor

During this year, Donald Graf and his graduate students continued their studies of the membrane properties of clays and the dehydration of common sedimentary minerals. An invited paper entitled "Geochemical inputs for hydrologic models of deep-lying sedimentary units: loss of mineral hydration water," presented before a joint IGC-IASH session in Paris, is now in press in Journal of Hydrology. W. M. Benzel and D. L. Graf will discuss "The effect of smectite layer thickness and fabric upon salt filtration at room temperature" at the Clay Minerals Society meeting in Urbana in October, 1981. D. L. Graf is co-convenor (with Y. K. Kharakha of the USGS, Menlo Park, California) of a session on "Shales and subsurface hydrology" at the national GSA meeting in November, 1981, in Cincinnati. In this session he will talk on "Chemical osmosis, reverse chemical osmosis, and the origin of subsurface brines." He has been asked to submit abstracts of talks to be considered for presentation in 1982 at an AAPG Research Conference, a Penrose Conference, and an American Chemical Society symposium.

Professor Graf has continued to supervise theses in other areas of geochemistry. Richard Cahill completed a master's thesis on the minor and major element composition of Lake Michigan sediments, which has been published in handsome form as Illinois State Geological Survey Circular 517. James Cobb completed a doctoral thesis on the geology and geochemistry of sphalerite in coal, and is now Head of the Coal Section, Kentucky State Geological Survey. He has been invited to present his thesis results at an SEG symposium in Dallas in 1982. Philip Bowden is now an exploration geophysicist with Exxon in Houston, where he is writing up his master's thesis on the use of satellite and aircraft imagery to detect alteration zones around orebodies at Tintic, Utah.

Ralph E. Grim, Professor Emeritus

Grim's major activities have been: an extensive study in the field and laboratory of the Tertiary and Cretaceous kaolins of the Georgia U. This has involved field studies and mineral and textural analysis. The objective is to obtain information on their mode of origin, and the fundamental factors controlling their physical properties.

He has done geological work in many countries (Australia, New Zealand, Brazil, Venezuela, Iran, South Africa, Ivory Coast, Etc.) and traveled extensively in many other countries.

He was elected Honorary member of the Society of Economic Paleontologists and Mineralogists.

Donald M. Henderson, Professor

Henderson has continued to look after our undergraduate and graduate students and to 'coordinate' departmental educational matters (not all are in octahedral or tetrahedral coordination). In so doing he has, perforce, gradually had to focus more and more on the structures and associated symmetries (acentric; P1 or P2?) of departments and colleges than of minerals (departments are more like clays than real minerals--take that J.H.!).

In July, 1980 he was alternate MSA representative to the IMA Commission on Teaching and History at the meeting of the International Mineralogical association in (old) Orleans. In November he was a member of a site visit team looking at the NRC Research Associateship Program in Earth Sciences at the NASA-Johnson Space Center in Houston. In February he served his



final time on an Earth Science Review Panel for the NRC Research Associate-ship Program in Washington, D. C. (Professors Jane Gray (U. of Oregon) and Karl Koenig (Texas A & M) former UIUC graduate students, were fellow panelists this last session.)

*(Since the above was written we regret to have to add that McKinley Hospital recently found that Prof. H. was suffering from chronic, and apparently incurable, paronomasia--Ed.)*

#### John Hower, Professor and Head

Hower is continuing, with his student Stephen Altaner, an investigation of the thermal history of sedimentary rocks in the overthrust belt of Montana and Alberta. Part of the past two summers was spent in the field, the first with Gene Whitney (Ph.D., 1979) and his 4-wheel drive USGS field vehicle named Mel Mudge, collecting rocks for this investigation. Hower has also begun a collaborative study with Bruce Velde of the Ecole Normale Supérieure of Paris, France, of the diagenetic mineral reaction sequences in sandstones of the U. S. Gulf Coast and the North Sea.

Hower, along with Don Graf, chaired the local committee for the 1981 meeting of the Clay Minerals Society, held on the U of I campus. During the past year he was appointed to the Advisory Committee of the Division of Earth Sciences of the National Science Foundation and as a member of the National Academy of Sciences committee investigating the feasibility and desirability of beginning a drilling program to sample sediments on the continental slope and rise, which would be funded by the National Science Foundation and major oil companies.

#### Albert T. Hsui, Assistant Professor

Over the past year, Dr. Hsui has developed two new courses: (1) Geodynamics, which covers many topics in quantitative analysis of the dynamical responses of the surface and the interior of the solid earth. (2) Numerical methods in geomechanics, which is designed to provide geology students with a working knowledge to carry out modern analysis utilizing electronic computers. In addition to teaching, he has continued his research on the following subjects: (1) Mathematical modeling of tectonic activities that are related to plate subduction; (2) Thermal-mechanical behavior of planetary interiors; (3) Thermal evolution of sedimentary basins. Additionally, he has served as an associate editor for the Proceedings of the 11th Lunar and Planetary Science Conference.

In June, 1981, Dr. Hsui was invited as a guest lecturer to visit the Institute of Geology of the Chinese State Seismological Bureau. He spent three weeks in Beijing, China. Many fruitful discussions with the Chinese geophysicists and geologists on earthquake prediction and on tectonic evolution of the north central China have been carried out. Besides scientific exchange, he also had an opportunity to visit many tourist attractions such as the great wall and the Imperial Palace, etc.

W. Hilton Johnson, Associate Professor

Dr. Johnson has made a good recovery from a mild heart attack of last spring. His troubles (origin unknown at the time) developed on a geomorphology field trip in southern Indiana and he ended up finishing the semester in the hospital. He is back to normal activities and fortunately has few restrictions.

Dr. Johnson was a participant in the 12th Annual Geomorphology Symposium which was held on campus this September. The Symposium was held for many years at SUNY-Binghamton but now moves each year and was hosted by the Department of Geography. Colin Thorn organized the program on "The Spatial and Temporal Validity of Geomorphic Data".

Dr. Johnson continues working with students and colleagues at the Illinois Survey on Quaternary stratigraphic and geomorphic problems in Illinois.

R. James Kirkpatrick, Associate Professor

In the past year Professor Kirkpatrick's research activities have focused primarily on experimental investigation of the rates of nucleation and growth of crystals from magma and on the geochemistry of basalts from eastern Ireland. The experimental work has included a low-angle x-ray scattering study of the formation of small clusters of atoms in melt, and the processes of nucleation in the system  $\text{MgO-SiO}_2$ . Professor Kirkpatrick was also co-convenor of the Mineralogical Society of America short course on Kinetics of Geochemical Processes, the papers from which have been published as Volume 8 of the MSA series Reviews in Mineralogy. He was also convenor of a session on melt structure and crystallization kinetics at the American Geophysical Union Annual Meeting and presented an invited paper at the GSA North-Central regional meeting.

George deVries Klein, Professor

During 1980-81, Dr. Klein taught Geology 309 (Sedimentology; undergraduate), and Geology 477 (Recent Sedimentary Environments; Graduate) during the Fall Term, and Geology 437 (Sedimentary Processes; Graduate) during the spring term. Enrollment interest was high in all these courses. Geology 477 ran its usual field trip to the Carboniferous rocks of the Ouachita Fold Belt and Arkoma Basin, the costs of which were funded by participants from the Champlin Petroleum Co. (See separate article.) One master's student (J. L. Shepard) finished a study of depositional systems in the coal-bearing rocks of western Kentucky under Klein's supervision.

Dr. Klein is still actively involved professionally in several ways. 1981 is his last year of a six-year term as Associate Editor of the Geological Society of America Bulletin. He continues on as a consulting editor for the McGraw-Hill Encyclopedia of Sciences, and Yearbook, and as chief consulting editor for geology for the CEPCO division of the Burgess Publishing Co. He also is continuing on as Chairman of the Working Group on Long-range Plans for Sedimentary Studies of JOIDES, and as a member of the JOIDES Panel on Sedimentary Petrology and Physical Properties. He also serves as a member of the Research Committee of the Society of Exploration Geophysicists. Finally, during 1980-81, Klein taught his short course on "Sandstone depositional systems for exploration" for the Society of Exploration Geophysicists at several locations, and is slated to offer this course at their annual meeting in Los Angeles in October, 1981.

During 1980-81, Klein published the second edition of his monograph "Sandstone depositional models for exploration for fossil fuels" and saw the completion and publication of the Leg 58 volume of the Reports of the Deep Sea Drilling Project representing the results of a DSDP cruise on which he served some years before as a co-chief scientist (and therefore co-principal editor of the volume).



Klein is continuing his research on dynamics of sedimentation of tidal current sand ridges in the Yellow Sea of Korea and has a paper in press on this activity. He co-chaired a session and presented the "close-out keynote" paper at the SEPM Research Conference on "Cratonic Sedimentation" at Devils Lake, Wisconsin, in August, 1981, and is continuing a sedimentary synthesis of back-arc basin sedimentology, focusing on depositional systems, sediment accumulation rates and sandstone diagenesis. This research was recently assured of continued funding by the National Science Foundation, and has received support from the University of Illinois Research Board.

Looking ahead, Klein says "1981-82 looks to be as hectic and busy as 1980-81" and then the LAS College has asked him to serve on its Educational Policy and Development Committee. "No rest for the wicked" sums it up best!

#### Ralph L. Langenheim, Jr., Professor

My faculty activities for 1980-81 include the following: (1) Served as President of the Illinois Geological Society for 1980-81. (2) Director Field Camp 1980 and 1981. (3) Continued research program in southern Nevada, taking three master's candidates and two senior thesis students to Arrow Canyon Range January 1981. Senior theses have been worked into a publication on the Gass Peak Thrust, the manuscript of which has been submitted for publication. The three master's are all working on brachiopoda from the Bird Spring Group. (4) have been invited to serve as a geological consultant to the Central Geological Survey of Taiwan.

Other things of interest, perhaps. John Morrone and Alan Hill both visited Field Camp this summer. Alan Hill is now in an independent geological and production firm operating in the Williston Basin and seems to be on the verge of very large practice.

Field Camp staff consisted of R. L. Langenheim, Dave Bieler, James Granath (alumnus BS and MS), C. Pius Weibel, Steve Laubach and Jim Haslett. We had 37 students. The weather was pretty hot and dry but the camp seemed to progress pretty well.

#### C. John Mann, Professor

Academically he continues teaching undergraduate courses and advising theses research. Four undergraduates completed thesis projects last year. He also served last year and continues this year as faculty advisor to the Cyclothem Club and Placement Coordinator for graduating students. Other duties include a term in University Senate and member of the Executive Committee of the World Heritage Museum.

His research continues on quantitative stratigraphic correlation of lithostratigraphic units as part of Project 148 of International Correlation Programme, International Union of Geological Sciences and on the development of theoretical stratigraphic concepts using fuzzy set theory. He also is continuing work with a physics professor on evolution of the Earth-Moon System.

Professionally he is currently serving as Deputy Editor of Mathematical Geology, the journal of the International Association for Mathematical Geologists; member of the U. S. National Committee on Mathematical Geology, National Academy of Sciences; member of Executive Committee of Mathematical Geologists of United States; chairman of Electorate E Nominating Committee,

American Association for the Advancement of Science; member of Medal Committee for Archaeological Geology Division of Geological Society of America; and member of House of Delegates, American Association of Petroleum Geologists. He was, during the past year, chairman of Nominating Committee for Archaeological Geology Division of G.S.A. and member of Electorate E Nominating Committee, AAAS.

#### Alberto Nieto, Associate Professor

Dr. Nieto took a Sabbatical leave during the spring semester. He visited central USA, Australia, Canada, Colombia, Hawaii, Mexico and Panama to study the role of geology in the exploration design and construction of large civil engineering undertakings or to be consulted on specific problems. He has obtained valuable ideas for research and is incorporating this experience in his graduate courses.

He is continuing his research on the shear strength of discontinuities (joints, faults, foliation) in rock masses. Two of his students (J. I. Maycotle and C. I. Lee) have recently finished their thesis work on this subject.

He has been invited to edit papers for the First ASCE Conference on Engineering and Construction in Tropical and Residual Soils (Honolulu), and to be a co-chairman of a regional symposium on slope stability to be held at Purdue University later this year.

#### V. Victor Palciauskas, Associate Professor

During the past few years, V. V. Palciauskas has continued his research on the high pressure and temperature properties of materials and the application of transport equations in modeling various geophysical processes. This work has led to several publications on the melting of minerals at high pressure, the thermal state of the earth's interior and to two recently published papers (with P. A. Domenico) on microfracture development in compacting sediments.

Present research has been oriented towards a theoretical description of the response of porous media to various conditions on thermal loading such as might be encountered due to burial, an igneous intrusion or near a radioactive waste disposal site. These model studies will consider the various thermally induced mineral transformations and the evolution of the pore fluid pressure and state of stress of the system. In the preceding years, Dr. Palciauskas has presented papers at the annual meetings of the American Geophysical Society, the American Physical Society and at the Assembly of the International Association of Seismology and Physics of the Earth's Interior.

#### Philip A. Sandberg, Professor

Dr. Sandberg just completed a year as vice-president of the Society of Economic Paleontologists and Mineralogists. He was involved with revision of the constitution and bylaws of the society and with the establishment and design of that society's new R. C. Moore Medal for Excellence in Paleontology. Recent work on skeletal and non-skeletal aragonites suggests that the Phanerozoic may be divided into several global oscillations between aragonite-facilitating conditions and conditions producing calcite only. These patterns tie in with sea level curves, major climatic cycles, and atmospheric  $p\text{CO}_2$  curves.

"Introduction to Modern Marine Carbonates," a field course in Florida, was offered again during Intersession 1981, under the direction of Dr. Sandberg. Twelve students, graduate and undergraduate, from our department participated, looking at the tertiary of west Florida and modern environments from Miami to Florida Bay and the reef tract of the Keys.

He and Dr. T. F. Anderson are continuing their combined textural-isotopic studies of ancient limestones, working with a new Research Associate in our department, Dr. Jeffrey Turner.

#### Harold W. Scott, Professor Emeritus

The highlight of the Scott's year was an extended tour of the oil fields of China, from Sinkiang, Inner Mongolia to Manchuria. We were greatly impressed with what the Chinese are doing in oil exploration and production. Their geologists are first-rate. The two fields of Karamay and Daqing have 12,000 wells. China's potential is bright. Our tour of over 9,000 miles in China opened our eyes to the potential of this great country.

The Scotts watch with great pleasure the continued success and accomplishments of our graduates. We seldom go any place, while lecturing or traveling, that we do not meet up with some of you. Our immediate plans are to continue our good health and to spend part of the winter in Portugal.

#### Jeffrey V. Turner, Post doctoral fellow, Research Associate

Ph. D. from Flinders University of South Australia and CSIRO working on environmental isotope methods in groundwater-lake relations. Spent 18 months at University of Waterloo, Ontario, addressing problems related to  $^{14}\text{C}$  dating of Quaternary lake sediments and also experimental work looking at kinetic isotope fractionation effects during crystal growth from solution.

Arrived at the University of Illinois November 1980 to work with T. F. Anderson and P. A. Sandberg on experimental alteration of high-magnesian calcites with regard to texture, stable isotope and cation composition. Also continuing the research into kinetic isotope fractionation.

#### Charles W. Uhl, Assistant to the Head

Chuck Uhl joined the Geology staff in December 1980 after retiring from the United States Air Force. Most of his assignments were in the field of education and/or management. He was the Executive Officer for an Air Tactical Group in the Far East, an AFROTC instructor at Duquesne University and the University of Pittsburgh, Asst. Chief of Methods Division at the Academic Instructors School (Maxwell AFB, AL), Deputy Commandant, Defense Language Institute East Coast Branch (Washington D.C.), Executive Officer, DLI Headquarters (Monterey, CA) and Chief Foreign Training Division (Chanute AFB, IL). Under USAF sponsorship, he attained a Masters degree in Business Administration and completed all the course work for the PhD at the University of Pittsburgh. He and his wife, Mary, reside in Rantoul, IL. Their two sons are pilot qualified engineering students attending military academies: The older, Chad, is a Junior (Cadet 2nd Class) at the U.S. Air Force Academy (Colorado Springs, CO) and the younger, Jon, is a Freshman (Midshipman 4th Class) at the Naval Academy (Annapolis, MD).



Linda M. Westgate, Assistant Geochemist

Mrs. Linda M. Westgate joined the University in November, 1979 as an Assistant Geochemist for the Department of Geology. Prior to her appointment with the University of Illinois, Mrs. Westgate worked for the Monsanto Company in St. Louis supervising the corporate Industrial Hygiene Laboratory. One of her major responsibilities included the operation and maintenance of a gas chromatography/mass spectrometer (GC/MSO used to identify and quantitate organic compounds in work related environments. She also developed and provided analytical techniques for measuring these organics, trained and instructed plant personnel in industrial hygiene techniques and good laboratory practices, and acted as a liaison between Monsanto operating plants and government regulatory agencies. In addition, Mrs. Westgate has worked in a quality control laboratory and in a mass spectrometry laboratory within Monsanto. She has a total of five years with Monsanto and in 1977 received her B.S. in chemistry from the University of Missouri in Columbia.

George W. White, Research Professor Emeritus

George W. White has just returned from the Ohio Geological Survey office in Columbus where he returned the edited text and map for the monograph Glacial Geology of Northeastern Ohio. This summarizes the work of several decades in the northwestern Allegheny Plateau. The reports on all fifteen counties have either appeared with the colored maps or are in editing or in press. The latest county map and text to appear was that of Lake County which is actually suburban to Cleveland. A paper on the earlier observation of curved slide surfaces of landslides in 1838 by William W. Mather, first State Geologist of Ohio, has appeared in the Canadian Journal of Technology in joint authorship with Robert F. Legget. Mr. White, a Charter Member of the Institute of Professional Geologists, is now a Certified Professional Geologist in Indiana (Illinois as yet has no certification procedure). Mr. White believes that certification is much preferable to licensing and the trend now seems to be toward certification by the various states rather than by licensing which has been the case earlier.



←  
Dr. George White  
busy with his  
maps

## DEPARTMENTAL NEWS

### Colloquim Programs

- August 29, 1980: DR. R. JAMES KIRKPATRICK (faculty member), "Processes of Crystallization in Pillow Basalts."
- September 5, 1980: PROFESSOR EMILIO GALAN (Depto. de Geologia, Universidad de Zaragoza, Zaragoza, Espana) "Genesis of Fibrous Clay Minerals."
- September 12, 1980: Dr. GEORGE DeVRIES KLEIN (faculty member), "Tidal Sand Body Sediment Dynamics in the Epicontinental Yellow Sea of Korea and its Implications for Clastic Cratonic Sedimentation."
- September 19, 1980: DR. DENNIS D. EBERL (faculty member), "Cation Exchange Reactions for Clay Minerals."
- September 22, 1980: SHARON A. STONECIPHER (Marathon Oil Company, Denver Research Center, Littleton, Colorado) "Diagenetic-Stratigraphic Modeling and the Oil Business."
- September 26, 1980: DR. GLEN K. MERRILL (Department of Geology, College of Charleston, Charleston, South Carolina 29401), "Biofacies and Depositional Systems in the Pennsylvanian of the Illinois Basin."
- October 3, 1980: LUNG-CHUAN KUO (Ph. D. candidate), "Petrologic Processes at Mid-Atlantic Ridge: Evidence from Morphology and Zoning Patterns of Plagioclase in Phyric Basalts from DSDP Lrhs 45 and 46."
- October 10, 1981: DR. BRUCE H. WILKINSON (Department of Geological Sciences, The University of Michigan, Ann Arbor, Michigan) "Holocene History of the Central Texas Coast - Facies Migrations through Time and Space."
- October 17, 1980: PROFESSOR GIANNI LOMBARDI (Istituto di Mineralogia e Petrografia, University of Rome, Italy) "Thermal Analysis of Rocks."
- October 24, 1980: DR. KENNETH A. GOETTEL (Department of Earth and Planetary Sciences and McDonnell Center for the Space Sciences, Washington University, St. Louis, Missouri) "Josephinite--Crustal or Core Origin?"
- October 30, 1980: DANIEL H. HOROWITZ (Exxon Production Research Company, Houston, Texas) "Early Deformational Features in Clastic Sediments."
- November 7, 1980: DR. D. BRYAN BLAKE (faculty) "Similarities Among Divergent Bryozoans: A Search for Explanations."

- November 14, 1980: BRUCE VELDE (Maitre de Recherche, University of Paris), "Weathering Reactions of Glauconite."
- November 25, 1980: DR. WALTER VORTISCH (Philipps University, Germany), "Petrology of the Non-carbonate Fraction of Low Ordovician Limestones of the Baltic Shield."
- December 4, 1980: DR. PAUL PUSHKAR (Department of Geology, Wright State University, Dayton, Ohio), "Geochemistry of Volcanic Rocks; St. Lucia, B.W.I. Caribbean."
- January 23, 1981: DR. J. J. SEPKOSKI (Department of Geophysical Sciences, University of Chicago), "The Three Great Evolutionary Faunas of the Marine Fossil Record"
- January 30, 1981: PROFESSOR WILLIAM C. HOOD (Southern Illinois University), "Coal Mine Related Water Quality Problems in Southern Illinois."
- February 6, 1981: DR. W. S. McKERROW (Department of Geology and Mineralogy, Oxford University), "Lower Paleozoic History of the Northwest Margin of the Iapetus Ocean."
- February 13, 1981: PROFESSOR ALFRED R. COOPER, JR. (Case Western Reserve University), "Multicomponent Diffusion and its Applications."
- February 20, 1981: DR. ROBERT C. ALLER (Department of Geophysical Sciences, University of Chicago), "Quantifying Solute Distributions in the Bioturbated Zone of Marine Sediments."
- February 27, 1981: DR. FRANK M. RICHTER (Department of Geophysical Sciences, University of Chicago), "Depth Extent of Mantle Convection."
- March 6, 1981: DR. ALBERT T. HSUI (faculty) "Saturn - A Voyager I View."
- March 27, 1981: DR. GEOFFREY F. DAVIES (Washington University, St. Louis), "Plate- Mantle Dynamics."
- April 3, 1981: PROFESSOR MARIA LUISA CRAWFORD (Bryn Mawr College), "Fluids in Metamorphic Rocks from Fluid Inclusions."
- April 10, 1981: DR. DENNIS S. WOOD (faculty), "Structural Geology: A Fourteen-year Ferrago at Illinois."
- April 17, 1981: PROFESSOR D. L. TURCOTTE (Department of Geological Sciences, Cornell University), "Geometrical Form of Volcanos."
- April 24, 1981: DR. R. L. LANGENHEIM (faculty), "Vulcanology of the Galapagos, 1980 G.S.A. Excursion."
- May 1, 1981: DR. ALAN P. MORRIS (Department of Geology, Wayne State University), "Structural and Tectonic Evolution of the Caledonides of Spitzbergen"



## Oil Company Donations

Two major oil companies have made significant donations to the department during the past year. The AMOCO Foundation has contributed a gift of \$100,000 to be used for research instrumentation. The EXXON Foundation, in an effort to support the teaching of engineering and engineering-related sciences, has contributed support to a number of universities including a \$50,000 graduate fellowship to the Geology Department of the University of Illinois.

## The Grim Chair

The generous donation of Professor Emeritus Ralph E. Grim has made possible the creation of a chaired professorship in the Geology Department at the University of Illinois. The position is called the Ralph E. Grim Professor of Geology and will be occupied by a geologist whose research and teaching interest is in the field of mineralogy or industrial minerals.

Dean William F. Prokasy of the College of Liberal Arts and Sciences has appointed a search committee which started its work this fall. The search committee is chaired by Professor David Lazarus of the Physics Department of the U of I. The committee members are Professors Donald L. Graf, W. Hilton Johnson, and Albert C. Carozzi of the Geology Department and Professor Edward C. Jonas of the Department of Geological Sciences at the University of Texas.

## Placement/Recruiting

The Geology Department Placement Program under the direction of Prof. John Mann (with the help of Pat Lane) had a full fall recruiting schedule. Many of the recruiters representing companies this year were alumni of the U of I as indicated below.

Sept. 14,15,16	SOHIO (Art Franz and C. Pratt)
Sept. 17,18	GETTY (Jeffrey D. Ruiz and Gary D. Meyer)
Sept. 24,25	CHEVRON (Steve and Tally Turek Tissue, MS77 & BS76)
Oct. 5,6	SHELL (Patricia Santogrossi, MS76)
Oct. 5,6	TEXACO (George Kreider)
Oct. 8,9	GULF (D. A. Schaefer and G. W. Fischer)
Oct. 12	CHAMPLIN (Jerry Sanders and Richard Castle, BS67)
Oct. 19	ARCO (Marcus Milling)
Oct. 21	PLACID (Jeff Newberry, BS72, MS74)
Oct. 22,23	EXXON (John Vercellino)
Oct. 27,28	AMOCO (Ed Loomis and Bruce Hill)
Nov. 12	SCALLOP (Peter C. Van Keekem, Shell Overseas Companies)
Nov. 17,18	MARATHON (Dan O. Veit)
Nov. 19,20	EXXON (Jeannie Kulla, Ph.D.78)

## Sabbatical Visitors

ROBERT C. REYNOLDS, JR., Professor of Geology at Dartmouth College, spent a sabbatical quarter, March to June, 1981, in the department. Professor Reynolds' research interests include low temperature geochemistry, clay mineralogy and petrology, and x-ray crystallography. He spent much of his time in the department working on a refinement of the numerical method he developed to simulate (00 $\ell$ ) diffraction profiles of mixed-layer clay minerals. His method is widely applied to studies of the diagenesis of clastic sediments, for clay mineral assemblages reflect the thermal and chemical history of these sediments. Reynolds' sabbatical research involved the solving effect of the "optics" of x-ray diffractometers on the intensities of the x-ray diffraction peaks of clay minerals.

Professor Reynolds also gave generously of his time discussing research problems with graduate students and faculty working on clastic and carbonate diagenesis.

DUANE M. (Dewey) MOORE, Professor (Ph.D., U. of I. 1963) of Knox College spent the spring 1981 semester on sabbatical leave in the department. Professor Moore worked on the crystal structure of hydrated smectite (montmorillonite) as a function of its water content as controlled by relative humidity. Much of his time was spent in collecting x-ray diffraction data on smectite in various hydration states and the interpretation of these data using Reynolds' computer simulation method. Professor Moore will present a paper on his results, co-authored with John Hower and Prof. Rossman F. Giese (SUNY, Buffalo), at the Clay Minerals Society meeting to be held at the U of I in October 1981.

BRUCE H. WILKINSON of the Department of Geology and Mineralogy, University of Michigan, spent a sabbatical quarter in our department during the fall of 1980. Professor Wilkinson, who has recently acquired a voracious appetite for carbonates, worked on that material in part in collaboration with P. A. Sandberg and B. N. Popp, and wrote on various manuscripts on carbonate and clastic sedimentology. During his visit he presented a colloquium on "The Holocene History of the Central Texas Coast."

## Summer Field Camp in Wyoming

The 1981 Summer Geology Field Camp, the twenty-seventh to be held at Sheridan, left Urbana June 15, 1981 and returned August 5. The camp now goes to Wyoming via Sioux City rather than taking an extra day to visit Baraboo on the trip out. We also have shortened the session to six weeks, as of 1976, in order to hold down expenses; both for the Department and the students.

This year's group included 37 students of whom only five came from off-campus and represented DePauw, Lawrence, Bryn Mawr, Carleton and Tufts. Expansion of our own undergraduate group and the physical and economic limitations on enrollment have substantially decreased the number of off-campus students that can be accommodated.

Our staff included R. L. Langenheim, Jr., Director; James Granath and David Bieler, Senior Staff; C. Pius Weibel and Steve Laubach, Graduate Assistants; and James Haslett, undergraduate student aid. Granath took his bachelor's and masters at the University of Illinois, writing a thesis under Dave Anderson on rocks in the Wind River Gorge. He was in transition from SUNY-Stony Brook to Conoco Research during summer 1981. Bieler, who served as an instructor, is a Ph. D. candidate in the Department, having an MS from Dartmouth and senior staff experience at Fort Hays State University in Kansas. Weibel is a doctoral candidate in stratigraphy and Laubach is a graduate student in structural geology. Haslett, who had just graduated did a senior thesis in structural mapping in Nevada. He is now seeking employment in the oil industry, but expects to return to graduate work next year.

The field camp program has undergone some modification over the years, but is still dedicated to teaching mapping methods and regional geology. Work in section measurement has been cut to measurement of one section, but we now teach both detailed and reconnaissance techniques. Plane table work has been reduced to four days mapping, but now includes topography, measurement of a section and the 'three-point' problem. Mapping on a topographic base occupies four field days and work on crystalline rocks is done in two days. Last year one day was spent on a pace and compass map of the Leopard Lode, which required compass triangulation and one day was spent mapping about twenty square feet of mignatite at a very large scale. We have a one-day exercise making a sketch profile of a thrust fault exposed in a road cut on highway 16 west of Buffalo. The air-photo exercise is much as you remember it, and requires seven field days effort. This year we added two mapping areas, one operating out of the campground at Burgess Junction and the other utilizing the space between Freezeout Point and Dry Fork Ridge. Both of these new areas are geologically challenging and one of them is entirely on public ground--access is becoming a problem at Sheridan and we are now excluded from the Beckton Stock Farm. The Parks Trip remains as it has been for some time; taking a full week visiting Yellowstone, the Tetons and the Wind River Basin.

## 477 Field Trip

Geology 477 Field Trip to Arkoma Basin and Ouachita Fold Belt, Arkansas and Oklahoma, Underwritten by the Champlin Petroleum Company

With continually increasing transportation costs facing the geology department, it is becoming more difficult to run field trips for advanced graduate students because of high costs. Geology 477, Recent Sedimentary Environments, taught by Dr. George deVries Klein, traditionally has included a six-day field trip to the Arkoma Basin and Ouachita Fold Belt to examine depositional systems and depositional environments of the Carboniferous rocks of that region. There, exceptionally-well exposed outcrops provide students an opportunity to examine ancient fluvial, deltaic, tidal flat, intertidal sand body, deep-water submarine fan and associated environments of deposition.

In the Fall of 1980, preliminary estimates indicated that this field trip would cost each of the seven students enrolled in the course \$133 per person for transportation costs alone. An additional \$35 was estimated for food and camping fees. These costs were too prohibitive for each of the seven students.

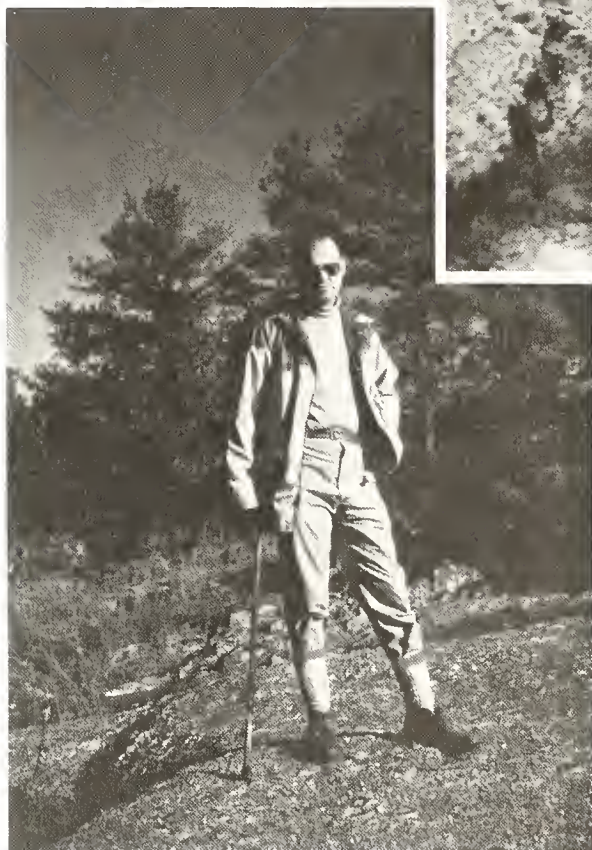
Dr. Klein contacted one of his former students, Jerome P. Walker, in the Denver office of the Champlin Petroleum Company, to determine if he and one or two additional Champlin geologists would want to participate in the field trip at a fee comparable to a standard industry-wide short course. Although Walker could not join the group, five Champlin Petroleum Company geologists wanted to participate, and joined the Geology 477 field trip to the Arkoma Basin and Ouachita Fold Belt. These geologists were Edward Hawkinson, John Moffitt and Julie Osborne from the Houston Office, Tom Creegan from the Oklahoma City Office and Steve Jennings from the Jackson Mississippi office. Their enrollment fees not only underwrote the transportation costs for the Illinois graduate students, but also enabled the geology department to restock the supplies in the department's sedimentology laboratory.

## Intercession Florida Field Course

For the second year, "Introduction to Modern Marine Carbonate Environments" was offered by Dr. Philip Sandberg. This course is one of several offered by various departments during the three-week Intercession period (between Spring and Summer terms). Brian Popp served as a volunteer TA, and boat captain. Twelve students from our department, both graduate and undergraduate, participated. The group caravanned down and en route, examined some west Florida Tertiary sections guided by Jack Meeder of the University of Miami. In the Miami area the class studied mud bank bottom communities and sedimentation, the famous Miami Oolite, and went out on a cruise on the Research Vessel Orca of the University of Miami, Rosensteil School of Marine and Atmospheric Sciences to examine patch reef and hard bottom communities. Later, based out of Key Largo, the class studied seaward of the Keys: carbonate banks, hard grounds, patch reefs, grass beds, and outer reef environments. In the protected Florida Bay they studied mud bank genesis and migration, development of mangrove islands, sea grass bed dynamics and bryozoan banks. On the Keys they examined the Key Largo Limestone and Miami Limestone in various quarries. Core samples of modern sediments were extruded and logged on shore in a study of the depositional history of the region.



Phil Sandberg &  
Students Mapping  
Coral Distribu-  
tion in Windley  
Key Quarry



Dr. George deVries Klein at outcrop of  
Atoka Group, Paris, Arkansas, listening  
intently and respectfully to student  
discussion deciphering the subtle com-  
plexities of multiple slump scars in a  
delta front facies. (Photo provided by  
Kathy Marsaglia)



C. P. Weibel &  
R. L. Langenheim  
giving lecture on  
the Gros Ventre  
Landslide in  
Wyoming







(L to R)  
C. Weibel, P. Sivon  
S. Volungis, B.  
Vaiden - Lunch  
Aboard the Sea Dweller



Back row (L to R) Paul  
Sivon, Kathy Marsaglia,  
Laurie Hartline, Ed  
Hawkinson (Champlin),  
Eric Lipman, Steve  
Jennings (Champlin), &  
Bob Cluff  
Front row John Moffitt,  
George deVries Klein,  
Janice Treworgy, Julie  
Osborn (Champlin), Tom  
Creegan (Champlin) &  
Yong Il Lee



Typical vehicle line-up  
at a lecture stop during  
the National Parks Trip.  
(notice all the open doors)





## Clay Conference

The Clay Minerals Society held its 18th meeting on the University of Illinois campus on October 4 to 8. The meeting was sponsored by the Geology Department and the Illinois State Geological Survey. Technical sessions were held in the Illini Union.

Two field trips were run. One was to the Cabot Corporation, manufacturers of fumed silica, and was run by William F. Moll, Research Director for Cabot. The second field trip was oriented to clay minerals and visited the famous Fithian Illite locality, viewed synerysious (sp?) structures in the Carbondale Fm landslides in the Forest Glen Preserve, and examined soil profiles developed on different slopes and differing parent materials including several paleosols. The clay mineral field trip was led by W. Arthur White, Leon R. Follmer, Randy Hughes, Dave Reinertsen, and David Burke, all of the ISGS.

Fifty-five papers were presented during the technical sessions (including one on geophagy in terrestrial animals!) A special session was held on the mineralogical transformation of smectite to illite and covered a range of subjects from the role this reaction plays in fluid overpressuring in sedimentary basins, through its occurrence in geothermal fields, to the thermodynamic properties of mixed-layer clay minerals.

The Clay Minerals Society meeting was co-chaired by John Hower and Donald L. Graf, and the technical program co-chaired by Dennis Eberl and Randall E. Hughes of the ISGS. Thomas F. Anderson was in charge of the special arrangements that provided the pleasurable amenities of the meeting and Joann Hower and Patricia Moll arranged the accompanying guest program.

The meeting was an occasion for the return of many U of I Geology Alumni (Dr. Grim's students for the most part, of course) including Dewey Moore (Knox College), Haydn Murray (Chairman at Indiana U.), Wally Parham (Office of Technology Assessment, U.S. Congress), Herm Roberson (SUNY Binghamton), Ken Towe (Smithsonian), Mike and Dottie Wahl (Mike is Dean of Arts and Sciences at the University of Florida), Gene Whitney (USGS), Charles Clemency (SUNY Buffalo), Bill Johns (Missouri), Len Schultz (USGS), and Al Rutsola (Michigan Tech).

## STUDENT NEWS

### Current Graduate Students

ADAMS, LESLIE E. - BA, George Washington University  
ALTANER, STEPHEN P. - BA, Colgate University  
BABB, ROBERT F. - BS, Rensselaer Polytechnic Institute  
BAKUSH, SADEG H. - BS, University of Tripoli; MS, Ohio State  
BARROWS, MARY H. - BS, University of Illinois  
BAUER, ROBERT A. - BS, University of Illinois, Chicago Circle  
BENZEL, WILLIAM M. - BA, Oberlin College; MS, University of Illinois  
BERTANI, RENATO T. - BS, University Federal do Rio Grande do Sul  
BONNELL, LINDA M. - AB and MS, University of Illinois  
\*BOWDEN, PHILIP R. - BA, Augustana College  
\*CARDINELL, ALEX P. - BS, University of Illinois, Chicago Circle  
CLUFF, ROBERT H. - BS, Univ. of California; MS, Univ. of Wisconsin  
COLTEN, VIRGINIA A. - BA, DePauw University  
DAWSON, WILLIAM C. - BS, University of Illinois; MS, University of Texas  
DEMIR, ILHAM - BS, Hacettepe University  
DIABY, IBRAHIMA - BS, Oregon State University, MS, University of Illinois  
ELSBREE, HOPE C. - BA, Smith College  
FEIZNIA, SADAT - BS, University of Tehran; MS, University of Illinois  
FERRETIZ, JORGE L. - BS, The Autonomous University of San Luis Potosi  
FIELLO, SUSAN C. - BS, University of Illinois  
FOOTE, GARY R. - AB, Hope College  
FOX, JOHN M. - BS, Southern Illinois University  
FRYER, KAREN H. - BA, Wellesley College  
GUENSBURG, THOMAS E. - BA and MS, Southern Illinois University  
HACKLEY, KEITH C. - BS, Pennsylvania State University  
HARTLINE, LAURIE E. - BS, University of Wisconsin  
HASKIN, MARK A. - BA, Florida Institute of Technology  
HAYDON, PAUL R. - BA, UCLA; MS, San Diego State University  
HEINRICH, PAUL V. - BS, Louisiana State University  
HORTON, DUANE G. - BS and MS, Western Washington State College  
HUFF, BRYAN G. - BS, University of Illinois  
HUTASOIT, LAMBOK M. - BS, Institute of Technology Bandung  
ILGENFRITZ, DEBORAH L. - BA, College of William and Mary  
JOHNSON, THOMAS A. - BS, Augustana College, MS, University of Wisconsin  
KASZYCKI, CHRISTINE - BA, Carleton University  
KIM, HYE SUN - BS, Seoul National University  
KNOWLTON, POLLY L. - BS, University of Massachusetts; MS, Univ. of Ill.  
KUO, LUNG-CHUAN - BS, National Taiwan Univ.; MS, University of Illinois  
LARSON, TIMOTHY H. - BS, Wheaton College; MS, Northern Illinois University  
LASEMI, ZAKARIA - BS, Pahlavi University  
LAUBACH, STEPHEN E. - BS, Tufts University  
LEE, CHUNG I. - BS, College of Chinese Culture  
LEE, YONG IL - BS and MS, Seoul National University  
LEPZELTER, CAROL G. - BA, SUNY Queens College  
LIPMAN, ERIC W. - BA, University of Pennsylvania  
MARSAGLIA, KATHLEEN M. - BS, University of Illinois  
MATTHEWS, PETER K. - BS, Washington State University  
McHONE, JOHN F., JR. - BS and MS, Old Dominion University  
MILLS, PATRICK C. - BA, Emory University; MED, Georgia State University

MORSE, WALTER J. - BS, Illinois State University  
 OESTRIKE, RICHARD, JR. - AB, Franklin and Marshall  
 OKHRAVI, RASOOL - BS and MS, University of Tehran; MS, Univ. of Illinois  
 OU, JOYCE LING-MEI - BS, National Taiwan University  
 OWEN, MICHAEL R. - BA, Earlham College; MS, University of Illinois  
 PADAN, ADY - BS and MS, Ben-Gurion University of the Negev  
 POPP, BRIAN N. - BS, University of Michigan  
 REARDEN, PHILIP J. - BS, Eastern Illinois University  
 \*RIVA-PALACIO, RICHARDO J. - BS, Universidad Nacional Autonoma de Mexico  
 RODRIGUEZ, NANCY M. - BA, Wellesley College  
 SCHRODT, JOSEPH K. - BA, University of Missouri; MS, University of Illinois  
 SMITH, LAURA A. - BS, Rensselaer Polytechnic Institute  
 \*SNYDER, EDWARD M. - BA and MS, Eastern Washington State College  
 STECYK, AMY N. - BS, University of Illinois  
 STERNBERG, ANN C. - BS, University of Wisconsin  
 SU, WEN-JUNE - BS, College of Chinese Culture; MS, National Taiwan Univ.  
 SWEET, MICHAEL L. - BS, University of Wisconsin, Madison  
 TARGOS, KATHLEEN A. - BA, Northwestern University  
 TREWORGY, JANIS D. - BS, Principia College  
 VAIDEN, ROBERT C. - BA, Rockford College  
 VON BERGEN, DONALD - BS, Wheaton College  
 WEIBEL, CARL P. - BS, University of Wisconsin  
 WESTGATE, LINDA M. - BS, University of Missouri  
 WOLFF, BRENO - BS, Universidade Federal do Rio Grande do Sul

---

\*Off campus.

### Cyclothem Club

1981-82

This club has not yet been organized this year--no officers elected but we should start shortly. The Club has been requested to participate in the annual rock and mineral show sponsored by the Prairie Gem and Mineral Society. Also, some students are hoping to organize field trips and speakers for the club.

Degrees Granted (August 1980 through August 1981)Bachelors

ANDERSON, GLEN P. (Aug. 1981) - "Fission Track Ages for Obsidian Cliff Flow, Yellowstone National Park, Wyoming" (Mann)

ARMS, ANDREW M. (May 1981)

ATCHISON, JAMES A. (Aug. 1981)

BARGH, BARBARA L. (Jan. 1981)

BENKOVICH, ALICE L. (May 1981) - "Sedimentary Petrology of the 'Marker Limestone', Morrowan Bird Spring Group, Clark County, Nevada" (Langenheim)

BILS, JULIE (May 1981)

BIRCH, BECKY A. (May 1981)

CLARK, THERESA L. (May 1981) - "Thickness Variation of No. 6 Coal in the Illinois Basin" (Mann)

DeVRIES, MAARTEN P. (Jan. 1981)

DYTRYCH, WILLIAM J. (Aug. 1981)

ERICKSON, MICHAEL (May 1981)

FORMAN, STEVEN L. (May 1981) - "Soil and Rock Stratigraphy of Quaternary Deposits, Indian Point Quarry, Menard County, Illinois" (Johnson and Follmer)

GATSIS, GEORGE J. (May 1981)

GLEIM, DOUG W. (May 1981)

GRAESE, ANNE MARIE (Jan. 1981)

HALLERMAN, DAVID M. (May 1981)

HASLETT, JAMES M. (May 1981) - "Geology of the Wamp Springs Area, Jayford Peak Quadrangle, Clark County, Nevada" (Langenheim)

HIRSCH, LEE M. (May 1981) - "Yield Point Determination: Method and Application to the Effects of Strain Rate Changes upon Ductile Behavior of Marble" (Holder)

HOPKINS, THEODOR W. (May 1981)

HOSTO, DOUGLAS D. (May 1981)

HUFF, BRYAN G. (May 1981)

JAHNKE, MARK W. (Aug. 1981)

JENKINS, JOHN E. (Aug. 1981)

JOHNSTON, JOHN M. (May 1981) - "Geology of the Northern Part of the Wamp Springs Area, Clark County, Nevada" (Langenheim)

KENT, RICHARD J. (Jan. 1981) - "Geology of a Portion of Bear Claw Ranch, Sheridan County, Sheridan, Wyoming" (Langenheim)

KONRATH, KEITH A. (May 1981)

KORN, BRYANT E. (Jan. 1981) - "The Compositional and Textural Zoning of Garnets in Calc-silicate Bands, Inverness-shire, Scotland" (Anderson)

KOTLARZ, CHRISTOPHER (Aug. 1980)

MAYER, ROBERT S. (Aug. 1981)

McMAHON, MICHAEL G. (Aug. 1981)

MIERISCH, MELODY (Aug. 1981)

MURPHY, THOMAS P. (Aug. 1981)

NICHOLSON, MARYLINN (May 1981)

NIEHOFF, THOMAS E. (Jan. 1981) - "Petroleum Production Profiles for Select Strata in Illinois" (Mann)

OLSON, GRANT R. (Aug. 1981)  
 PAPESH, JUDITH A. (May 1981)  
 RAUH, JEFF S. (Aug. 1981)  
 SELLERS, ELLEN M. (May 1981)  
 STECYK, AMY N. (Jan. 1981)  
 UPTON, EDWARD G. (Jan. 1981)  
 VOLUNGIS, SARAH (May 1981)  
 WEAR, DAVID E. (May 1981)  
 WOODLAND, ALAN B. (May 1981)

#### Masters

BANAE, JILA (May 1981) "Microfacies and Depositional Environment of the Bailey Limestone (Lower Devonian) Southwestern Illinois, U.S.A., A Carbonate Turbidite" (Carozzi)  
 DIABY, IBRAHIMA (Jan. 1981) "Microfacies of the Salem Limestone (Middle Mississippian), Southwestern Illinois, U.S.A." (Carozzi)  
 FEIZNIA, SADAT (Jan. 1981) - no thesis (Carozzi)  
 FLEEGER, GARY M. (Aug. 1980) "Pre-Wisconsinan Till Stratigraphy in the Avon, Canton, Galesburg, and Maquon 15 Minute Quadrangles, Western Illinois" (Johnson)  
 FRITZ, JEFFREY L. (Jan. 1981) "Systematics, Biostratigraphy, and Paleoenvironment of Desmoinesian, Missourian and Virgilian Syringoporiid Corals of the Bird Spring Group, Arrow Canyon Range, Clark County, Nevada" (Langenheim)  
 KETTLES, INEZ M. (Oct. 1980) "Till Stratigraphy of the Vandalia-Effingham-Marshall Region, East-Central Illinois" (Johnson)  
 KNOWLTON, POLLY L. (Aug. 1980) - no thesis (Wood)  
 MAYCOTTE, J. A. (Oct. 1980) "Engineering Geology and Slope Stability Assessment of the Caracol Hydroelectric Project, Mexico" (Nieto)  
 OKHRAVI, RASOOL (Jan. 1981) - no thesis (Carozzi)  
 ROJSTACZER, STUART A. (Aug. 1981) "Moisture Movement Through Layered Soils of Highly Contrasting Texture" (Domenico)  
 SCHRODT, JOSEPH K. (May 1981) - no thesis (Holder)  
 SHEPARD, JOHN L. (Aug. 1980) "Sedimentology of a Pennsylvanian, Coal-Bearing, Cratonic Delta; Upper Tradewater Formation, Western Kentucky" (Klein)  
 WILDANGER, EDWARD G. (Aug. 1980) "Sinkhole-Type Subsidence Over Abandoned Coal Mines in St. David, Illinois" (Nieto)

#### Doctorals

COBB, JAMES C. (May 1981) "Geology and Geochemistry of Sphalerite in Coal" (Graf)  
 FALKENHEIN, FRANK U. (Jan. 1981) "Carbonate Microfacies and Depositional Evolution of the Macaé Formation (Albian-Cenomanian), Campos Basin, Brazil" (Carozzi)  
 FRANKE, MILTON R. (Jan. 1981) "Natural Porosity, Diagenetic Evolution and Experimental Porosity Development in Macaé Carbonates (Albian-Cenomanian), Campos Basin, Offshore Brazil" (Carozzi)  
 HARRIS, HENRY J. H. (May 1981) "Hydrology and Hydrogeochemistry of the South Fork, Wright Valley, Southern Victoria Land, Antarctica" (Domenico)  
 LEARY, RICHARD L. (Oct. 1980) "Paleogeomorphology Affecting Early Pennsylvanian Floras in Rock Island County, Illinois" (Mann)  
 MOORE, DAVID W. (Jan. 1981) "Stratigraphy of Till and Lake Beds of Late Wisconsinan Age in Iroquois and Neighboring Counties, Illinois" (Johnson)



## GEOLOGY LIBRARY NEWS

Long standing recognition that the collection of early geology books on the Urbana campus is a nationally important one and an expression by the Department of Geology for its proper care, has led to plans to transfer many valuable titles from Geology Library to the Rare Books Room in the main library. In addition, we are identifying other titles in our open stacks which should receive special handling; for example, we are now restricting circulation of our early Survey Reports of the Territories, which are in very poor condition. In the coming year we are planning to acquire from George White additional important early American works, plus very rare editions of Lhwyd, Maclure, Mitchill, and Smith.

A six percent increase in monies allocated to us for current materials will not keep pace with inflation, but by exercising discretion, we should continue to give excellent support to our departmental research efforts.

The Geology Library staff is now at full strength. We are Dedy Ward (Librarian), Diana Walter (Library Technical Assistant), Linda Russie (Clerk II, full-time), and Kate Hunter (Clerk II, half-time). In addition to our routine duties, we have been working on ways to improve service to our customers--for example, extending hours of access and revamping the map room.

Alumni continue to tell us of their good fortune to have worked with this outstanding geology collection. Drop by the library on your next visit to Urbana--check our latest acquisition lists and chat with members of the staff.

Geology Librarian Dedy Ward is chairing the Geoscience Information Society's committee to organize the Second International Conference on Geological Information to be held in Golden, Colorado (Colorado School of Mines) on May 23-27, 1982. The first conference was held in London in 1978 and drew 190 delegates from 22 countries.

Dedy's latest publication is a co-authored bibliography entitled Geologic Reference Sources (2nd edition, Scarecrow Press). GRS is a guide to the general reference literature in geology and its subdisciplines. The general geology of countries and regions is also featured.

A project planned with former Geology Librarian Harriet Wallace and several members of the department faculty involves the annotated compilation of early and rare geology books held by the University of Illinois. A possible publication source, for which Dedy serves as Editor, is the Robert B. Downs Publication Fund, which specializes in the publication of guides to the many important collections in the University of Illinois Library.



# ALUMNI NEWS

1981

DON C. BALDWIN (BS, 1949), Lieutenant Colonel, USAF (Ret.), is an earth science/mathematics teacher at Peru, New York, High School. Following his retirement from the military in 1966, Baldwin took his M.A.T. in mathematics at Duke University and has since taught in New York.

DEBORAH M. BLIEFRICK (BS, 1975) attended graduate school at the University of California, Santa Cruz. Dissertation was on sedimentology and diagenesis of some modern carbonates in the Bahamas. Received Ph. D. in Earth Science in August, 1980. During October and November 1980, participated as sedimentologist on Leg 76 of the Deep Sea Drilling Project. Drilling was in the Balke-Bahama Basin, just east of Florida and north of the Bahamas. In December 1980, moved to Houston and began working for Gulf Research and Development at their Lab in Houston.

MICHAEL BOURQUE (MS, 1978) was married in July 1980 in New York to a Vassar graduate from South Carolina with five years experience with Chevron. Her name is Marsha. Mike works for Shell.

ROBERT J. CORDELL (BS, 1939; MS, 1940; PhD, University of Missouri, 1949). Four years ago, he completed 26 years with the Sun Company (Sun Oil), including stints as manager of geological research, senior section manager, and head of basin evaluation and petroleum habitat studies. In mid-1977 he became president of Cordell Reports, Inc., involved in the writing and marketing of geological-hydrocarbon potential reports on various areas. Home base is in Dallas, Texas.

LARRY E. DRAFALL (BS, 1967) is enjoying St. Louis at new job and enjoying new son, Carl, born August 23, 1980.

PETER FENNER (MS, 1961, Ph.D. 1963) - a news release from the Purdue Calumet News tells us that Peter has spent two decades in higher education as an administrator and earth science educator and July 1, 1981 was appointed Vice Chancellor for Academic Affairs at Purdue University, Calumet.

C. P. M. HEATH (MS, 1963, PhD, 1965) has been transferred from Chicago to Houston, now is Chief Geologist for Central and South America and the Far East.

ALAN HILL (BS, 1977) reports that he has left Shell, or rather left Houston. He was to be returned to Houston, so left for Nance Petroleum in Billings, Montana--where he is only 'minutes from his office'. He is working on petroleum exploration in the Williston Basin.

STEPHEN JAMRISKO (BS, 1971) and wife, Joan, have a daughter, named Kristin, who arrived in 1980. Steve is now a Lt. Cdr. and expected to leave Guam for the U.S. in April, 1981.

WARREN KING (BS, 1964; MS, 1971) is at Ohio State University with responsibility as Director of the Office for Disability Services. Warren was featured in the April 1981 OSU Monthly dealing with Eliminating Educational Barriers.

# Stony Brook

1 September 1981

To fellow alumni and esteemed faculty of the Geology Department, greetings!

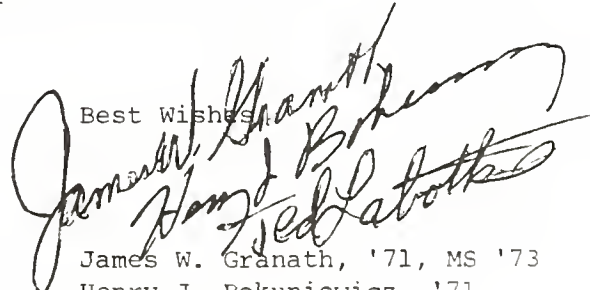
A little more than ten years ago we three, Hank Bokuniewicz, Jim Granath, and I, Ted Labotka, shared an apartment on west Main Street in Urbana. We were all members of the Cyclothem Geology Club and while I was president our apartment was the locus of many cheerful and drunken gatherings sponsored by that honorable organization. Our landlady, Mrs. Green, probably still shudders at the thought of the lakes of beer on the kitchen floor, the broken toilet seat that was worn as a collar by some of our more inebriated guests, and the body paint that inadvertently had been sprayed on the walls. One of these events that was particularly memorable was the Halloween costume party at which the wife of a graduate student did not heed the warnings of another guest who had 'dressed' as a flasher and who was not wearing a bathing suit under his raincoat. We also sponsored a Christmas caroling party that was such a success that, we are happy to hear, was continued in succeeding years. What a year that was!

Following our graduation, Jim stayed at UI for an MS in geology which he received in 1973; he then went to Monash University, Melbourne, Australia, and received the PhD in 1976. Hank left in 1971 to become a graduate student in the Department of Geology and Geophysics at Yale University; he received his doctorate in 1976. I went to Caltech and received the PhD in geology in 1978; I was a slow learner.

We are not convinced whether fate controlled our destinies or whether coincidence prevailed. Jim returned to the States in 1976 to take a position as assistant professor in the Department of Earth and Space Sciences at the State University of New York, Stony Brook. The following year, he was surprised to find that Hank had joined the faculty of the Marine Sciences Research Center on the same campus. The coincidence was compounded the following year when I joined the research staff of the ESS Department at Stony Brook. After seven years we were all back at the same university; however, our travels describe a kinetic process. Jim is leaving Stony Brook to become senior research geologist in Oklahoma with Conoco Exploration Research, and I will also leave Stony Brook next year. But with a mean free path of about 13000 miles and a relaxation time of about 7 years, who knows where we will meet again in 1988?

Contrary to what you might think, we do not share an apartment. Neither we nor our wives would stand for that.

Best Wishes



James W. Granath, '71, MS '73  
Henry J. Bokuniewicz, '71  
Theodore C. Labotka, '71

DAVID W. LARSON (BS, 1975, M.S. Univ. of Wisc.) - according to a Franklin and Marshall College press release David who is currently finishing his Ph.D. at Yale will begin teaching duties at F & M in August.

GARY N. MEYER (BS, 1971, MS Univ. of N.D.) - according to an October 1980 newspaper married Miss Wanda J. Chaplin in Minneapolis, MN where he is employed with the Geological Survey.

LESLIE GRAVES OLSON (BA, 1977) is currently employed with the geotechnical department of Century West Engineering in Bend, Oregon. Work includes archeological investigations as well as hydrogeological and engineering geology consulting.

ROBERT LOUIS REINKING (PhD, 1967) was appointed Chairman of the Geology Department, Hope College, Holland, Michigan.

NANCY GERHARD RYAN (BS, 1946, MS, 1948) is a staff member of Dames & Moore in Washington, D. C. Nancy and her husband (Robert) have been engaged for many years in various overview assignments principally throughout Asia. Their current project is a review of National Flood Insurance Program. Sometime ago Dr. White was in a lager shop in London when someone in another part of the pub was heard to say, "That has to be Dr. White," who then replied, "That has to be Nancy G." Nancy and Bob were on their way from the U.S. to see the Far East.

FRED R. SHIRLEY (BS, 1978) and his wife, the former Ginger Levine, are presently living in Buenos Aires, Argentina where Fred is a Senior Geophysical Analyst for Denver Processing Center, Inc. He has been with the company since 1979.

RICHARD ELBRIDGE SMITH (MS, 1960; PhD, 1966 Penn State) has been with the Strategic Petroleum Reserve (SPR) since its inception in 1975. Presently Chief of the Technical Branch in the Washington, D. C. Headquarters Office (Program Office). The SPR is approaching 100 million barrels of oil in storage--all in salt domes in Texas and Louisiana. By publication of the next newsletter, we should have 200 million barrels or more stored in solution-mines, 10 million barrels in caverns and in a converted salt mine.

STEVE TISSUE (MS, 1977) and TALLY TUREK TISSUE (BS, 1976) visited Urbana-Champaign in September 1981. He is a geologist recruiting for Chevron. She is a paleontologist with Chevron. They reside in Lacombe, LA.

JOHN B. TUBB, JR. (PhD, 1963) was named Vice President of Exploration of ANR Production Company, in Houston, Texas, effective July 3, 1980. ANR is a subsidiary of Michigan Wisconsin Pipe Line Company. Tubb joined ANR Production Company in 1977 and has served in various management positions since that time. His most recent assignment has been Director of the Southern Region.

LOUIS UNFER (BS, 1948) has recently retired from the Army Reserves as a Colonel. He is currently President of the Association of Missouri Geologists.

NEIL H. WHITEHEAD, III (MS, 1976) received PhD from The University of North Carolina at Chapel Hill (1979). He was Assistant Professor of Geology at the University of Louisville (1977-1981). Now with Gulf Oil Exploration and Production Company at Casper, Wyoming as Exploration Geologist.

TOM WORSLEY (PhD, 1970) was featured in "Outlook" November 1980, Ohio University Staff Publication dealing with the Geology Department. A stratigrapher and micropaleontologist, he has been at Ohio since 1976.

## IN MEMORIAM

GERALD V. HENDERSON (PhD)

48, of Rowland Heights, California, professor of engineering and mining geology at California State Polytechnic University, Pomona (since 1970); engineer, Gladding, McBean & Co., (1966-69); assistant professor of geology, California State College, Los Angeles (1969-70); researcher in clay mineralogy; February 7, of a heart attack, in Rowland Heights.

GEORGE BARGH

Served 23 years as administrative assistant and executive assistant to the president of the University of Illinois. His wife, Margaret Ann Hayes Bargh and a daughter, Barbara Bargh are both alumnae of the University of Illinois

PAUL BOYER (PhD)

40, died August 19th at the Sidney Farber Inst. of the Harvard Hospitals in Boston. Paul entered graduate study at the University of Illinois in Feb. 1963. During his 5 years at Illinois he was a TA and RA working primarily for Adrian Richards, Hough and White. Paul's death was attributed to mesothelioma (considered to be caused by exposure to asbestos micro-fibers).\* He was a professor of geology at Okaloosa-Walton College in Niceville, Florida at the time of his death. He is survived by his parents and a four year old son.

\*Please see NOTICE on page

## GEOLOGY ALUMNI DIRECTORY

A geology Alumni directory is being planned. At present we are waiting for the University of Illinois Alumni Association to set up a computer program to produce photo ready information for our directory. We tentatively plan to list both home and business addresses with an indication as to which address is to be used for mailing.

Your help in sending us address changes or additions will make our directory a useful information source for our Alumni and "friends" who have asked to be on our mailing list.

On the last page of this Newsletter a form is provided to help you keep us informed.



### NOTICE\*

Paul Boyer's father is doing a considerable amount of research on Mesothelioma ("Steve McQueen disease") and has asked for names and addresses of any of Paul's associates from 1963 to 1969 when he received his Ph.D. Anyone who might know of Paul's activities in caving or anywhere that he might have been exposed to (a) radioactive environments or (b) asbestos-containing environments should contact

Donald Allen Boyer  
448 Willow Street  
West Barnstable, Mass. 02668  
(ph. 617-362-2668)

\*See IN MEMORIUM



Home Address:    Add [ ]                    Change [ ]            Mailing Address [ ]

Name \_\_\_\_\_

Street or P.O. \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Phone (optional) \_\_\_\_\_

Office Address:    Add [ ]                    Change [ ]            Mailing Address [ ]

Name and Title \_\_\_\_\_

Inst. or Co. \_\_\_\_\_

Street or P.O. \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Phone (optional) \_\_\_\_\_

If this information is not returned before publication of the Alumni Directory the information presently on file at the U of I Alumni Office will be used for the directory.

Please use the reverse side of this page if you wish to have information included in the next issue of the Newsletter.

fold here

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Place  
Stamp  
Here

Mrs. Patricia Lane, Editor  
Department of Geology  
253 Natural History Bldg.  
1301 W. Green  
Urbana, IL 61801







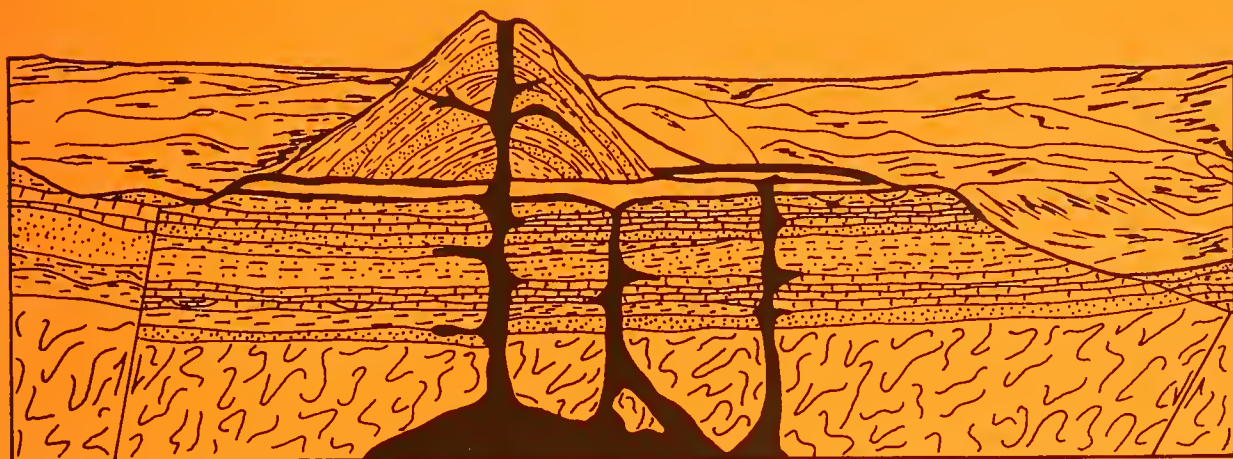






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# TWENTY - SEVENTH ANNUAL NEWSLETTER



## DEPARTMENT OF GEOLOGY

UNIVERSITY of ILLINOIS

at

Urbana - Champaign

1981 - 82



# DEPARTMENT OF GEOLOGY

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June 1982

Dear Alumni and Friends:

This is the second Newsletter to be edited by Pat Lane, our departmental secretary. As you will see, she was quite successful on her campaign to increase the Alumni News section. Please make the effort this year to send us some news about yourself. Lots of alumni say they are more interested in reading about what has been happening to fellow ex-students than any other part of the Newsletter.

As you know, these have been times of great mobility for geologists. Our department has been hit harder than most. Pat Domenico is leaving to accept a chaired position at Texas A & M, Jon Holder resigned to return to his beloved Texas. He and Linda will be living in Austin, where Jon will be a consultant. In addition, Don Graf has retired, so the efflux of well-known and established faculty members is an important and serious matter for our department.

The U of I, as with other state universities, is suffering financially from the state of the economy. Until this year, the department continued to receive budget increases (at a rate somewhat less than inflation). This year, rather than the usual modest increase, the U of I budget was reduced. The department took its share of this cut. Happily, funding from external grants has increased significantly over the past few years and has helped to compensate somewhat for the reduction in state support. We are also grateful to those of you who have made gifts to the department over the past year.

The Grim Chair Search Committee (Albert Carozzi, Don Graf, Hilt Johnson, Ed Jonas (Ph.D., '54), and Dave Lazarus (of the U of I Physics Dept., Chairman of the committee) is close to completing its task. I wish things were far enough along to include the news in this Newsletter--but you will just have to wait.

That's about it for now. Give us something for the Alumni News!

Sincerely,

  
John Hower  
Department Head

JH:kr



June 1982

Dear Alumni:

Well it doesn't seem like it has been any time at all since we were wrapping up the last Newsletter, but here it is time for the next one. Information in the Newsletter is intended to cover the time-span June 81-June 82, although last year's Newsletter overlapped a bit.

This year's Newsletter has been put together with the thought that pictures speak louder than words. We have included informal pictures of our faculty, club activities, and a collage of pictures taken at this year's geology banquet held in honor of our graduating seniors.

We are also including the directory that we have been promising for some time now. The U of I Alumni Office was unable to provide the directory material for us so we have typed this directory from information received from you, as well as from the departments Alumni listing provided by the Alumni Office. As the department will soon be installing a CPT Word Processing System, we hope to be in a position to have updated Alumni Files available in the department for future directories. There are of course many other exciting possibilities for the Newsletter when this equipment is operative.

As always the task of putting the materials for the Newsletter together have been shared by the office staff. Barbara Blackowsky sorted through and typed the entire directory. Karolyn Roberts typed and assisted the editor in preparing the faculty profiles and Alumni News items; Laura Harbison provided the Colloquium information and Geology Club News; Carol Sanderson was responsible for Undergraduate and Graduate information and Murle Edwards provided the paperwork so necessary to the preparation, printing and mailing of the Newsletter each year.

Thanks go to each of you who sent your comments, suggestions and directory information to us. The more people we hear from the more the Newsletter can be truly directed to Alumni News. Please keep in touch, we don't want to lose you.

Sincerely,

A handwritten signature in cursive script, appearing to read "Pat".

Pat Lane  
Newsletter Editor

## ADJUNCT FACULTY

- LEON F. FOLLMER (Ph.D., Illinois) - Paleopedology, soil geomorphology, quaternary geology [Illinois State Geological Survey, Urbana]  
JAMES E. KING (Ph.D., Arizona) - Quaternary palynology and paleoecology [Illinois State Museum, Springfield]  
JACK A. SIMON (M.S., Illinois) - Coal geology [Chief, Illinois State Geological Survey, Urbana]

## EMERITUS FACULTY

CARLETON A. CHAPMAN  
RALPH E. GRIM

ARTHUR F. HAGNER

HAROLD W. SCOTT  
GEORGE W. WHITE

## ACADEMIC STAFF

PATRICIA J. LANE - Department Secretary and Editor  
CAROL SANDERSON - Secretary-Transcribing  
LAURA HARBISON - Clerk-Typist III  
KAROLYN ROBERTS - Clerk-Typist III

## BUSINESS OFFICE

CHARLES W. UHL - Assistant to Head  
MURLE EDWARDS - Chief Clerk  
BARBARA BLACKOWSKE - Clerk-Typist III

## TECHNICAL STAFF

JOHN F. BAUERLE - Instrument Maker and Shop Supervisor  
CAMERON BEGG - Microprobe Analyst  
DONALD D. DODSON - Instrument Maker  
DAVID R. PHILLIPS - Cartographer  
JACK O. PULLEN - Physical Science Technician

## 1981-82 DEPARTMENT COMMITTEES

ADMISSIONS: R. J. Kirkpatrick (Chm.), P. A. Sandberg, G. deV. Klein, D. M. Henderson (ex of.)

ADVISORY: W. H. Johnson, D. B. Blake, R. J. Kirkpatrick

COLLOQUIUM: T. F. Anderson

COURSES & CURRICULA: D. B. Blake (Chm.), R. J. Kirkpatrick, W. H. Johnson, C. J. Mann, P. A. Sandberg, D. M. Henderson (ex of.)

GRADUATE: D. L. Graf (Chm.), A. V. Carozzi, V. V. Palciauskas, A. T. Hsui, D. M. Henderson (ex of.)

LIBRARY: A. V. Carozzi (Chm.), D. L. Graf, A. T. Hsui, R. L. Langenheim

PLACEMENT: C. J. Mann

TECHNICAL SERVICES: P. A. Sandberg, D. E. Anderson, T. F. Anderson, C. W. Uhl (ex of.)

UNDERGRADUATE: W. H. Johnson (Chm.), A. S. Nieto, V. V. Palciauskas, D. M. Henderson (ex. of.)

## FACULTY PROFILES

DAVID E. ANDERSON  
Professor



B.S. 1961, Ph.D. 1966, University of  
Sydney

Metamorphic and Theoretical Petrology

Dave is chairman of the Structural Geology Search Committee, is a member of the Centre for Electron Microscopy Committee, and is chairman for the Ad Hoc Committee in Graduate Education in Geology, and is also Affirmative Action Officer for the Faculty.

Dave has taught Electron Microprobe Analysis (Geology 493W), Theoretical Petrology (Geology 434), and Introduction to Mineralogy-Petrology (Geology 332) during this past year.

An abstract, "A Non-Steady State Model for Garnet Zoning" (with J. C. Olimpio), Geological Society America, Cincinnati, Ohio was presented as was "Diffusion Halos Around Zoned Garnets in the Moine Schists, Scotland", Geological Society America, Cincinnati, Ohio this past year.

Papers published were "Geochemical Inputs for Hydrological Models of Deep-Lying Sedimentary Units: Loss of Mineral Hydration Water" (with D. L. Graf), J. Hydrology, and "Diffusion in Electrolyte mixtures in 'Kinetics of Geochemical Processes'", Lasaga, A. C. and Kirkpatrick, R. J., eds.

Much of the last year has been taken up with three projects. 1) The completion of three manuscripts on compositional zoning in metamorphic garnets from the Moine schists in north-western Scotland. Some results of this work were presented (with Dr. Julio Olimpio) in papers at the annual meeting of the Geological Society of America in Cincinnati. 2) Theoretical work on diffusion in binary aqueous electrolytes. The problem of how to include activity relations into the equations for ionic diffusion remains frustratingly elusive, even though the nature of the problem has been well defined for nearly fifty years. 3) The accurate measurement of compositional gradients in glasses. This work is being carried out for Dr. A. Cooper of Case Western Reserve, University.

Dave is hoping to launch two new projects in the near future: a comprehensive study of diffusion in ternary aqueous electrolytes (with Don C. Miller and Joseph A. Rand at Lawrence-Livermore Labs) and a structural and petrological study of inverted metamorphic zones in the vicinity of thrust faults (with W-P Chen at Illinois and Karl Jacobsen at Iowa State).

THOMAS F. ANDERSON  
Professor



Professor Anderson served on the Department Admissions Committee, organized the Colloquium programs for 1981-82 and chairs the Hydrogeologist Search Committee.

Teaching Assignments included: Chemistry of the Earth (Geology 360), Geology of Coal (Geology 493) and Isotope Geology (Geology 433). He continued to serve on the selection panel for the campus-wide Graduate Student Research Paper competition, sponsored by the Society of Sigma Xi.

B.S. 1961, DePauw University  
Ph.D. 1967, Columbia University

Stable Isotope Geochemistry;  
Oceanography

He is principal investigator on current grants: "Use of coordinated Textural Data in Interpretations of Ancient Limestones" from the National Science of Foundation and the American Chemical Society and "Stable Isotope Studies of Coal and Related Mineral

Matter" from the Department of Interior Office of Surface Mining. He is supervising research being done on Coordinated textural, isotopic and elemental analyses of constituents of limestones with Brian Popp, Isotopic and chemical records of Phanerozoic brachiopods with Carol Lepzelter, Sulfur isotope variations in the Herrin coal, Illinois Basin with Linda Westgate, An isotopic study of coal balls in the "Cordaitan" interval of marine influence during middle Pennsylvanian time with Kathleen Targos and Distribution and isotopic composition of sulfur in Tertiary and Cretaceous coals of the Rocky Mountain coal region with Keith Hackley. He also actively collaborated with Jeffrey Turner (Research Associate) on experimental diagenesis of magnesian calcites. Papers presented and published during 1981-82 included: "Calcareous nannofossils: Isotopic and biostratigraphic records in a Pleistocene core" with J. C. Steinmetz, NATURE, 1981 (presented at the Spring meeting of the American Geophysical Union); GSA presentations, "Oxygen isotope paleo-oceanography of the Eocene North Atlantic Ocean (S. J. Goldstein); "Coordinated textural, isotopic and elemental analyses of constituents in some Middle Devonian limestones (B. N. Popp); "Sulfur isotope evidence for the origin of sulfur in coal" (L. M. Westgate).

Professor Anderson (along with Brian Popp and Jeffrey Turner) was invited to participate in an SEPM Conference on Stable Isotopes in Sedimentology in August, 1981. As an outgrowth of that meeting, he was selected to help organize and prepare an SEPM Short course on the topic, which will be offered at the 1983 AAPG-SEPM meeting. He is continuing to cooperate with the U.S. Army's Cold Regions Research and Engineering Lab on a study of the origin of ground ice in Alaska. Future research plans include mass and isotopic balance considerations on the burial of organic carbon and sulfur in Cretaceous marine sediments and the application of natural sulfur isotope variations to coal desulfurization processes.





Daniel Stewart's College, Edinburgh;  
Heriot-Watt University, Biochemistry,  
Edinburgh; N. Polytechnic, Physics,  
London, 1970

Cameron was brought up in Edinburgh, Scotland and educated at Daniel Stewart's College. After attending Heriot-Watt University and discovering his total disbelief in integral calculus, he went to London where he worked at the City University as an X-ray technician in the crystallography laboratory during the day, and earned his HNC Degree in Physics at night and on weekends. Experience gained in crystallography enabled him to transfer to the soil physics laboratory in the Civil Engineering Department of City University, where amongst other things he set up and ran X-ray diffraction equipment for the analysis of clay minerals. This developed a keen interest in hard rocks; so he jumped into the magma at the deep end and took up employment at the University of Edinburgh Grant Institute

of Geology Experimental Petrology Unit, where he eventually ended up in charge of the high-pressure side of the experimental facilities with all its attendant paraphernalia. As time went by, Cameron became more and more aware that the results of these high-pressure experimental runs were being "probed". It was to this probe -- a Cambridge Instruments Microscan 5 -- that he became enslaved (entirely by his own volition) under the direction of a good friend Peter G. Hill. He loved it! All his favorite analytical toys plus computers in the same setup. While D. A. Anderson was on sabbatical leave in Edinburgh, it came to light that his contract was expiring, so Champaign-Urbana was discussed. After a pre-med of "Dukes of Hazard" and "Dallas" on BBC-TV, the Beggs arrived in C-U to discover that power, lust and car flying were not absolutely mandatory, and that in fact some things here were positively good - he even made a point of photographing breakfasts.

His arrival in October 1981 put him down in the middle of an electron microprobe course being run by Professors Anderson and Woodhouse, but he managed to teach the students something about the instruments in the hastily arranged practical classes. Just before Christmas he went to Madison, Wisconsin where he was able to meet the manufacturers of the automation equipment and those responsible for the software. During these months he was able to identify problems in the microprobe labs and in the preparation of sample thin sections. With the generosity of Arnold O. Beckman, a benefactor of the University, from whose bequest we have obtained funds to purchase modern computing equipment, most of the microprobe problems will be resolved. Automated lapping and polishing machines should soon be producing thin sections in quantity for the whole department.

In the future, Cameron seeks to develop the microprobe facilities of this department into a service available and easily accessible to the University as a whole and the Geology Department in particular.

DANIEL BLAKE  
Professor



B.S. 1960, University of Illinois  
M.S. 1962, Michigan State  
Ph.D. 1966, University of California

Invertebrate Paleontology;  
Biostratigraphy

Dan was awarded N.S.F. support for research on sea star phylogeny, to study at museums in the U.S. and western Europe this year so he is taking sabbatical leave to do just that. He spent much of the spring in Washington, D.C. and London, England and plans to leave for Australia soon to attend meetings in Sydney. He will give an invited presentation on "Fossil Sea Stars" and "Biologic Controls on Distributions of Shallow Water Tropical Sear Stars" at the Symposium on Marine Biogeography and Evolution in the Pacific. A field trip to western Australia to see modern and ancient reef environments, stromatolites and Shark's Bay is also planned.

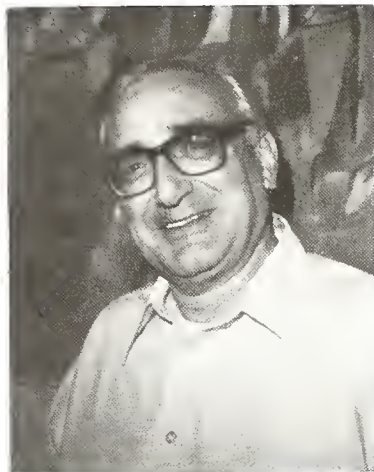
Before starting his sabbatical this spring, Dan served on the Dept. Advisory Committee, and was chairman of both the Department Graduate Programs Committee and the ad hoc committee on Introductory courses.

He taught General Paleontology, Paleoecology, and gave seminars on Echinoderms, Bryozoans, Biostratigraphy and Paleoecology. Class field trips included the Upper Mississippi Valley to see Ordovician carbonates and Silurian reefs in Chicago; and the Paleozoic section, primarily Carboniferous of Eastern Kentucky.

Dan gave one part of a short course at the G.S.A. meeting in Cincinnati this year and gave a talk and published a paper, both under the title: Paleoecology of Bryozoans. He also gave a talk at the International Conference on Echinoderms in Tampa, Florida in September 1981 on "Classification and Phylogeny of Somasteroidea and Asteroidea". A paper is in press.

He published two papers on the taxonomy and phylogeny of sea-stars: "A reassessment of the sea-star orders Valvatida and Spinulosida." Journal of Natural History, 1981, v. 15, pp. 375-394; and "Somasteroidea, Asteroidea, and the affinities of Luidia (Platasterias) latiradiata, Palaeontology," 1982, 25:167-191.

ALBERT CAROZZI  
Professor



M.S. 1947, University of Geneva;  
Geology and Mineralogy  
Ph.D. 1948, University of Geneva

Sedimentology; Sedimentary Petrography;  
Petroleum Geology

with associates from Yacimientos Petroliferos Fiscales on aspects of petroleum geology of Argentina which included Maria Luisa Cafferata, presently a research associate in the Department.

Following the Symposium, Carozzi took part in a geological expedition which covered the Andes and their foothills over 2,000 miles from the Aconagua area all the way to Patagonia and Tierra del Fuego where it terminated at Ushuaia, the southernmost town in South America on the Beagle Channel.

Upon return to Buenos Aires, Carozzi gave in Spanish a week-long course on the petrography and depositional environments of carbonate rocks under the auspices of the Geological Society of Argentina with more than 100 participants.

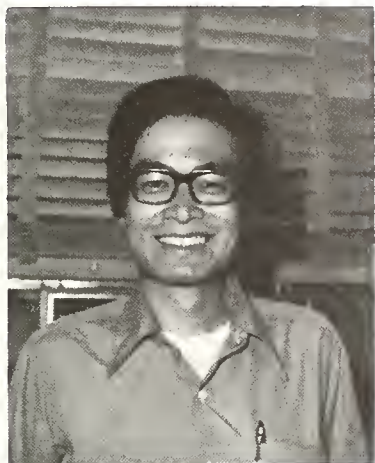
A presentation at the 148th National Meeting of A.A.A.S. in Washington, D.C. started the 1982 year. His invited paper for the Symposium was entitled "What happened to the idea of moving continents after Wegener proposed it?"; the paper dealt with the European reaction to Wegener's idea.

Early 1982, PETROBRAS, the Brazilian National Oil Company published in a joint authorship with Carozzi the doctoral theses of Frank Falkenheim and Milton Franke. The book of 140 pages with color plates of carbonate diagenesis is entitled "Petroleum Geology of the Macaé Formation of the Campos Basin."

Besides teaching and supervising graduate students most of 1981 was spent in the organization of the first Latin-American Symposium on Carbonate Rocks which was held in conjunction with the 8th Congress of the Geological Society of Argentina in San Luis, Argentina, September 20-26, 1981.

Carozzi as President of the Symposium gave the inaugural address in Spanish entitled "Present and Future Trends in the Study of Carbonate Rocks". Among the many papers presented at the three-day Symposium were joint contributions with graduate students of this Department: Sadat Feiznia, Ibrahima Diaby and Breno Wolff dealing with North American and Brazil as well as contributions with former graduates: Yaghoob Lasemi and David Rich. A paper was also presented on behalf of William Dawson and three papers were prepared





B.S. 1974, National Taiwan University  
Ph.D., MIT, 1979, Geophysics

Geophysics, Seismology, Tectonics

Since joining the department in September of 1981, Chen has been busy with his research and teaching Geology 397 (Physics of Earthquakes) in the Spring, as well as being an undergraduate advisor.

Of course, setting up a seismology laboratory here at Illinois was of major concern as well as a collection of WWSSN seismograms (in microfilm form) for twenty stations, four years in-house, another four on order. The acquisition of a 17" X 24" microfilm viewer/printer, and a 17" X 24" high resolution ( $\pm 0.001"$ ) digitizer interfaced with a CRT terminal have been set up.

Chen is excited about his research on intraplate earthquakes. From a careful analysis of the depth of these events, he can now conclude that the seismic activities are sensitive to temperatures. The limiting temperature for crustal materials is about  $350 \pm 100^\circ\text{C}$  and about  $700 \pm 100^\circ\text{C}$  for mantle materials. Furthermore, an aseismic lower crust of many active mountain belts are sandwiched between seismically active upper crust and upper mantle. This indicates that the lower crust has low mechanical strength. Thus, thick ( $>15\text{km}$ ) crystalline nappes might occur there.

In the course "Physics of Earthquakes", subjects such as Quaternary history of faults, mechanical properties of geological materials, geodetic data, plate tectonics, as well as seismological evidence and mathematical modelling are used extensively to characterize the physical processes involved in earthquakes.

There were papers to be published and presented at meetings as well. These included: Molnar, P., W-P. Chen and P. Tapponnier, Constraints of the Amount of North-South Shortening in Tibet during the Cenozoic, in "Proceedings of Symposium on Tibetan Plateau", Vol. I., Gordon and Breach Science Publishers, N.Y., pp. 757-761, 1981; Chen, W-P. and P. Molnar, Constraints on the Seismic Wave Velocity Structure beneath the Tibetan Plateau, *ibid.*, pp. 763-770, 1981; "Some Geophysical Aspects of Thickened Continental Crust - Constraints from Earthquake Seismology," presented at the Lower Crust Workshop, Princeton University, April 16, 17, 1982; and Molnar, P., W-P. Chen, and E. Padovani, Temperatures in Overthrust Terrains and the Origin of Tertiary Granites in the Greater Himalaya, submitted to J. Geophys. Res., 1982; Tapponnier, P., P. Molnar, and W-P. Chen, Active Normal Faulting in Tibet, in "Proceedings of Symposium on Tibetan Plateau", 43-50, 1981; Chen, W-P. and P. Molnar, The Depth Distribution of Intracontinental and Intraplate Earthquakes and Its Implications for the thermal and Mechanical Properties of the Lithosphere, submitted to J. Geophys. Res., 1982; Molnar, P. and W-P. Chen, Depths and Fault Plane Solutions of Earthquakes under the Tibetan Plateau, submitted to J. Geophys. Res., 1982.

DONALD L. GRAF  
Professor



B.S. 1945, Colorado School of Mines  
M.A. 1947, Columbia University  
Ph.D. 1950, Columbia University

Sedimentary Geochemistry; Mineralogy

1981. Graf, D. L., Chemical osmosis, reverse chemical osmosis, and the origin of subsurface brines: To appear, Geoch. Cosmoch. Acta, August, 1982. Graf, D. L. and Goldsmith, J. R., Some hydrothermal syntheses of dolomite and protodolomite: In Dolomitization (D. H. Zenger and S. J. Mazzulo, Eds.), Benchmark Papers in Geology, Scheduled for publication October, 1982.

Don taught Geology 360 (Chemistry of the Earth and also supervised William M. Benzel, Paul Haydon, Virginia Colten, and Ilham Demir for Ph.D. Theses.

He took early retirement at the end of the 1981-82 academic year, and became Professor Emeritus. His future professional plans are still being shaped.

Donald L. Graf is Chairman of the Graduate Study Committee. He was Coconvener and speaker at the Symposium on Shales and Subsurface Hydrology, Geological Society America Annual Meeting, Cincinnati, Ohio in November, 1981. Don was also an invited speaker at the Symposium on Colloidal Properties of Clays, American Chemical Society National Meeting, Las Vegas, Nevada, from March 28-April 2, 1982. Also, he was a speaker at the Geological Society of America Penrose Conference on "Hydrodynamics and Geochemistry of Ore Generation in Sedimentary Environments," Lake of the Ozarks from May 23-28, 1982.

His recent scientific papers include: Graf, D. L., and Anderson, D. E., Geochemical inputs for hydrological models of deep-lying sedimentary units: loss of mineral hydration water: Jour. Hydrol., 54, 297-314,



DONALD M. HENDERSON  
Professor



A.B. 1943, Brown University  
Ph.D. 1950, Harvard

Mineralogy; Crystallography

hosted by the LAS Honors Council and was aimed at trying to improve the LAS Honors Program. (DMH was a member of the Council a few years back.) The participants included LAS honors students, faculty, some administrators and some "people outside academe". In May, DMH finished his term on the LAS Undergraduate Committee and came to the end of a spell of more than 10 years on LAS committees. He'll take a rest from such committees for awhile.

As for teaching, he gave Geol. 107, General Geology I (for geology majors and other science oriented students) with Kirkpatrick and Geol. 335, Optical Mineralogy, during the fall. During the spring, he gave Geol. 332, Mineralogy and Petrology, with D. Anderson. The 332 field trip to the Upper Peninsula was finally "weathered out", for the first time in 13 years!

This year passed pretty quietly for Henderson and with fewer forays away from Urbana-on-Boneyard than in the last few years. His activities were mainly more of the same from previous years.

He continued as departmental Educational Coordinator, looking after various matters having to do with undergraduates, graduate students, and teaching assistants as well as being an ex. of. member of the Geology Admissions, Graduate, Undergraduate, Advisory, and Courses and Curriculum Committees. He also looked after the department as the Acting Head, for the last two summers.

On the LAS College level, Henderson was a participant in a fall weekend LAS Honors Conference at Allerton Park. The Conference was



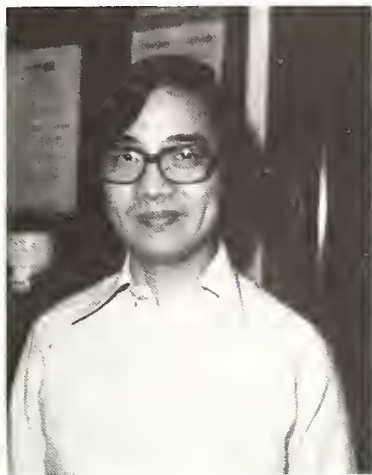
A.B. 1952, Syracuse University  
M.A. 1954, Washington University  
Ph.D. 1955, Washington University,  
St. Louis.

Diagenesis; Clay Mineralogy

Hower is continuing to work on the origin of potassium bentonites with his student Steve Altaner and in collaboration with Gene Whitney (Ph.D., '79) of the U.S.G.S. and Jim Aronson at Case Western Reserve University. Altaner, Whitney, and Hower spent several weeks in the overthrust belt of Montana this summer doing detailed collecting of samples of bentonites and the enclosing strata. Hower also spent the earlier part of the summer in Creede, Colorado with his student Duane Horton, who is doing a wall rock alteration study of the amethyst - OH vein system at Creede. Hower also received a NSF/International Programs grant from the U.S. - France program to work, in collaboration with Bruce Velde (B.S., '59) of the Ecole Normal Supérieur in Paris, on clay mineral reactions during the burial diagenesis of sandstone in the North Sea and the U.S. Gulf Coast.

During March, Hower gave talks at the University of Montana on the "Temperature Dependence of the Smectite - Illite/Smectite - Muscovite Reaction Sequence" and on "Metamorphic Reactions on Mesozoic Strata in the Disturbed Belt of Montana". He also took part in a three-day symposium in Denver organized by the U.S.G.S. on the diagenesis of sediments. Hower gave the introductory paper in the section on the diagenesis of finegrained clastics.

This year Hower was elected to the Executive Committee of the LAS College. He will serve two years. He is a member of the National Academy of Sciences Committee on Scientific Ocean Drilling. This committee, which was formed at the request of Congress, met several times during the past academic year to consider the future scientific viability of the NSF's deep sea drilling program. He is also a member of the NSF Advisory Committee on Earth Sciences which met in Washington, D. C. this spring.



B.S. 1968, Lowell Technological Institute; M.S. 1969, Cornell University; Ph.D. 1972, Cornell University

Geophysics; Mathematical Modelling;  
Geodynamics and Planetary Interiors

in some limited success. Furthermore, he has actively sought donations of geophysical teaching equipment from major petroleum and service companies. Unfortunately, the result has not been very encouraging as yet but he plans to continue his efforts. In the past year he has served on the following departmental committees: Ad hoc committee on graduate student evaluation; Library committee; graduate committee; search committee of structural geologist and search committee for hydrogeologist.

Besides fulfilling his teaching responsibilities, and committee work Albert has continued his research on the following subjects: 1) Mathematical modeling of tectonic activities and planetary interiors; 2) Thermal evolution of sedimentary basins. He is currently developing a new research program together with R. J. Kirkpatrick on magma chamber dynamics.

Papers published are "Some Remarks on the Thermal Consequences of Ridge Subduction," Geophysical Research Letters; "On Melting of the Subducted Oceanic Crust: Effects of Subduction Induced Mantle Flow," with M. N. Toksöz, Tectonophysics; and a contributing author of Basaltic Volcanism on the Terrestrial Planets, Pergamon Press, Inc.

Papers presented were "On the Heat Source Beneath Back Arc Basins," (abstract) AGU Midwest Meeting Program, Minneapolis, Minnesota on September 17, 18, 1981, and "Effects of Thermal Cooling and Mechanical Shearing at a Vertical Boundary on 2-D Thermal Convection and Their Geophysical Implications" (abstract) EOS. Am. Geophysics Un.

Albert Hsui joined the University of Illinois Geology Department in January of 1980. During the past year, he has taught two new courses 1) Seminar in Igneous Processes: this course was taught together with R. J. Kirkpatrick and V. V. Palciauskas. The purpose of this seminar was to survey the current understanding on the geology and geophysics of igneous activities. 2) Exploration Geophysics: This course is intended to provide the advanced undergraduate and beginning graduate students with an introductory knowledge of geophysical techniques that are commonly employed for petroleum and mineral exploration. Besides teaching, he has also been involved actively in recruiting geophysics students. For example, he has given many colloquiums on various topics of earth sciences to students of different departments in the engineering college here on campus, and to students off campus as well. This effort resulted

W. HILTON JOHNSON  
Associate Professor



A.B. 1956, Earlham College  
M.S. 1961, University of Illinois  
Ph.D. 1962, University of Illinois

Quaternary Stratigraphy;  
Glacial Geology;

County were finally held. Geol. 301 rescheduled for April 20 and Geol. 101 to Bedford, Indiana near Blue Springs Caverns had to be cancelled due to severe weather conditions and could not be rescheduled.

Johnson presented a paper entitled "Interrelationships Among Geomorphic Interpretations of the Stratigraphic Record, Process Geomorphology and Geomorphic Models" at the Twelfth Annual Geomorphology Symposium which was held on campus in September 1981. A paper entitled "Space and Time in Geomorphology" is to be published in the symposium volume and a poster session paper on "Patterned Ground in Central Illinois: Evidence for Permafrost During the Last Glaciation" was presented at the 7th Biennial Meeting of the American Quaternary Association.

During 1981-82 Johnson served on the Geology Advisory Committee, the Undergraduate Committee, Courses and Curriculum Committee, and the Grim Search Committee. Outside committee work included serving on the Quaternary Advisory Committee for Stratigraphic Code Revision; U.S. Committee for International Geological Correlation Project #24 and Quaternary Glaciations in the Northern Hemisphere.

He taught Geology 101 (Introduction to the Study of the Earth) for both the fall and spring semesters, and he taught Geology 301 (Geomorphology) during the spring semester.

After several cancellations because of weather, one-day field trips to Collison, Illinois north of Kickapoo State Park in Vermillion



R. JAMES KIRKPATRICK  
Associate Professor



B.S. 1968, Cornell University  
Ph.D. 1972, University of Illinois

Igneous and Experimental Petrology

Jim just recently returned from Cyprus where he was working on the Troodos Ophiolite Complex, a segment of oceanic crust. The project is sponsored by the International Crustal Research Drilling Group, and involves both field work and work with drill core. His primary objectives were to examine the sulfide ore deposits to determine the pattern, chemistry, and physical conditions of the hydrothermal convection cells which were present in the oceanic crust when it formed and to examine the zoning patterns in plagioclase crystals in the gabbro units to examine the processes occurring in sub-ridge magma chambers.

Hope Elsbree, who is a graduate student, worked with him in Cyprus on the hydrothermal alteration of the basalt and the formation of the sulfide ore deposits.

He served as Chairman of the Departmental Admissions Committee and is serving on the Departmental Advisory Committee. He has also served a two-year term as the departments UIUC Senate representative.

Classes taught during 1981-82 included: Geology 107 (Introductory Geology), Geology 336 (Igneous and Metamorphic Petrology), Geology 493 L (Kinetics of Geological Processes), and Geology 493 K (Geophysics Seminar). Jim and the students in Geology 107 participated in a field trip to the St. Francois Mountains in Missouri in November of 1981 to study the pre-Cambrian and early Paleozoic geology.

Jim presented a paper at the Fall AGU Meeting in San Francisco entitled "Theory of Nucleation in Silicate Melts" which will be published in The American Mineralogy.

In addition, he published a paper entitled "Pre-Eruption History of Phyric Basalts from DSDP Legs 45 and 46: Evidence from Morphology and Zoning Patterns in Plagioclase" with L-C. Kuo in Cont. Min. Pet., v. 79, p. 13-27.



GEORGE deVRIES KLEIN  
Professor



B.A. 1954, Wesleyan University  
M.A. 1957, University of Kansas  
Ph.D. 1960, Yale University

Sedimentology; Marine Geology; Sandstone Petrology and Diagenesis;  
Petroleum Geology of Clastic Reservoirs

tems. Dr. Klein also published a paper entitled "Probable sequential arrangement of depositional systems on cratons" (Geology, 10, 17-22; 1982).

During this academic year, Klein was awarded an Associateship in the Center for Advanced Study of the University; the appointment is to take effect during the Spring term, 1983.

Dr. Klein is actively involved professionally in several ways. He continues as a consulting editor for the McGraw Hill Encyclopedia of Sciences and Yearbook, and as Series Editor for Geological Sciences Monographs of the publishing division of the International Human Resources Development Corporation in Boston. This is his last year as chairman of the Working Group on Long-Range Plans for the JOIDES Panel on Sedimentary Petrology and Physical Properties. He continues on the JOIDES Sedimentary Petrology and Physical Properties Panel and was recently appointed that panel's new chairman for three years. Finally, during 1981-82, Dr. Klein taught his short course "Sandstone depositional systems: a primer for geophysicists" for the Society of Exploration Geophysicists at several locations, including the offering of this course at that Society's annual meeting in Los Angeles in October, 1981.

Besides all this activity, Dr. Klein remarried on May 23, 1982 to Ms. Chung Sook Chung. Chung, a Korean-American, is originally from Seoul, Korea, and was educated at the Hyungi Girls High School and earned a BA from Ehwa Woman's University. In 1966, she came to the USA as an exchange student at the University of San Francisco. She returned to Korea for a brief period, returning to Chicago in 1976, working there first in the Korean Consulate as a Bi-lingual visa officer and for the last four years as a personal banker at the Commercial National Bank in Chicago. She is looking forward to meeting some of the departmental graduates at the GSA in New Orleans.

During 1981-82, Dr. Klein taught Geology 309 (Sedimentology; undergraduate), Geology 310 (Field and Laboratory Procedures in Sedimentology; undergraduate lab course that goes with Geology 309), and Geology 477 (Recent Sedimentary Environments) in the Fall term and Geology 437 field trip to the Ouachitas and Arkoma Basin was partially supported by the Getty Oil Company office in Oklahoma City (see separate articles). One Ph.D. student (Y. I. Lee) is presently working with Dr. Klein undertaking a study of sandstone diagenesis in the back-arc basins of the western Pacific.

Klein is continuing his research on a sedimentary synthesis of depositional systems, sediment accumulation rates and sandstone diagenesis in the back-arc basins of the western Pacific. This research is funded by a grant from NSF. He is also continuing his research on shelf sediment transport in the Yellow Sea of Korea, and together with a student, Kathleen Marsaglia, completed a study of paleogeography of storm depositional systems.

RALPH L. LANGENHEIM, JR.  
Professor



B.S. 1943, University of Tulsa  
M.S. 1947, University of Colorado  
Ph.D. 1951, University of Minnesota

Stratigraphy, Paleontology, Field  
Geology of Energy, Coal

Summer semesters as an additional car driver and somebody who could talk geology.

Although he was invited to give a paper for the Atokan Symposium at Norman, OK in the spring, his teaching load was such that he did not present the paper but the manuscript is a part of the symposium volume. (It is a proposal for a reference section at Arrow Canyon.)

While on sabbatical in the Republic of China on Taiwan, he was acting as an advisor to the Central Geological Survey in regard to their geological mapping program in the central mountains, training of young personnel and other things. He spent twenty-six days traveling in the areas to be mapped and to educational institutions and geological organizations - such as China Petroleum Corp., Sinotech (engineering consultants group), MRSO (more or less the Bureau of Mines), etc. As a consequence he really got to see the island and meet many geologists. Field survey included a five-day, thirty-five mile backpack trip to the top of Yushan (4,000 M), the highest peak on the island and the highest peak between Hawaii and the Himalayas.

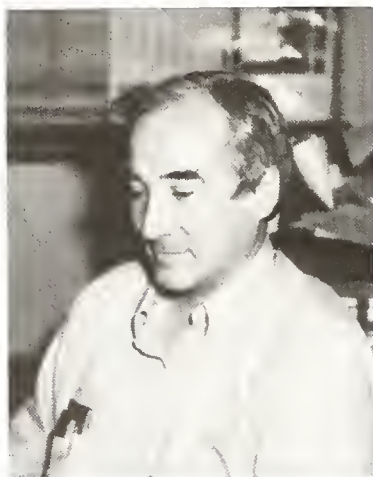
"The experience was most rewarding in that the program was well organized, there were clear-cut objectives, and it was possible to make a real contribution to the Survey. This is not always the case in such affairs, and I want it known that the Republic of China on Taiwan is a modern, energetic and effective organization that has given its people an apparent high standard of living, a booming economy and what appears to be a great deal of effective personal freedom."

Ralph taught field camp in Wyoming during the summer of 1981, was on Sabbatical in the fall and taught a regular spring semester load of Geology 105, Geology of Energy; Geology 321, Principles of Stratigraphy (with C. J. Mann), and Geology 115, Geology of the Grand Canyon Region, as well as Geology 422 (usually taught in the fall but taught by popular demand in the Spring); and Geology 102 while Blake and Sandberg were on Sabbatical leave.

Ralph's usual ten day excursion to the Grand Canyon via Denver, the Colo. Plat., Las Vegas, etc., started with a fever of 100°, but he survived to make the descent into the canyon after arriving in a spring blizzard--eight inches of snow and more coming all the time. "It was a good trip."

He accompanied John Dennison on an AAPG field short course in the Appalachians between the Spring and

C. JOHN MANN  
Professor



B.S. 1953, University of Kansas  
M.S. 1957, University of Kansas  
Ph.D. 1961, University of Wisconsin

Stratigraphy; Mathematical Geology;  
Petroleum Geology

Academy of Sciences, and a member of the Geochautauqua Steering Committee. During the past year he ended a term as Chairman of Electorate E Nominating Committee for the American Association for the Advancement of Science and an Alternate Delegate to the American Association of Petroleum Geologists. He has been busy this past year planning and organizing the 11th Annual Geochautauqua which will be held on campus on 1-2 October 1982; this years theme will be "New Developments in Quantification of Coal Geology". The meeting is being co-sponsored by the Department of Geology, Illinois Geological Survey, and Southern Illinois University.

During the 1981-1982 school year, Professor Mann taught during the Fall semester Geology 142, Physical Science in Modern Society (substituting for John Holder who was on leave) and Geology 324, Late Cenozoic Geology and during the Spring semester Geology 108, General Geology II and Geology 321, Principles of Stratigraphy (with Ralph Längenheim). The normal field trips to Southern Indiana (Geol. 108) and Upper Wabash River Valley (Geol. 321) were taken during the spring but in addition an interesting trip to the local Clinton Nuclear Power Plant was enjoyed during good autumn weather in Geology 142. One masters student, Mark Haskins finished his study of Geology of Tulupe, Ecuador Archaeological Site under Mann's supervision.

Dr. Mann is still actively involved professionally as Deputy Editor of Mathematical Geology, a member of the United States National Committee on Mathematical Geology for the National



B.S. 1961, San Marcos University  
M.S. 1963, Washington University  
Ph.D. 1974, University of Illinois

Engineering Geology; Applied Rock  
Mechanics

anniversary of engineering geology trip to that place.

During January through May, the first field course on geological field techniques for technical engineers was organized to be given along with regular field courses in Wyoming. Carl Weibel will be instructing.

Publications are "Landslides" and "Mass Wasting" being published in McGraw-Hill Encyclopedia of Science and Technology, 5th Edition. "An Alternate Hypothesis for Sinkhole Development above Solution-Mine Brine Cavities in the Detroit Area" is being published in the U.S.G.S. Open File Report.

In research, Alberto continued studies of shear strength of rock masses, subsidence, and geomechanical characterization of large engineering sites. Wen June Su (Ph.D. candidate) will continue work that Alberto initiated for his own Ph.D. on shear strength of clay-fill discontinuities.

In December of 1981, Alberto was invited to present a General Report on Geomechanical Characterization of Large Engineering Sites at the 1st South American Conference on Rock Mechanics, sponsored by the International Society for Rock Mechanics in Bogota, Colombia, November 1982.

Alberto S. Nieto participated in the 1982 Chancellor's Conference at Allerton on the subject "The University and the Outside World" in March of this year. In April, he cochaired a session on engineering geology at the North Central Meeting of GSA at Purdue University at Lafayette, Indiana.

In September-December, he began incorporating into Geology 451 (Practice of Engineering Geology) case-histories studied during his sabbatical leave. Alberto also taught Geology 250 and 450. In Geology 450, the class went to Baraboo, Wisconsin for the 25th



VICTOR V. PALCIAUSKAS  
Associate Professor



B.S., University of Illinois, 1963  
M.S., University of Illinois, 1964  
Ph.D., University of Illinois, 1969

Theoretical Geophysics; Transport  
Processes

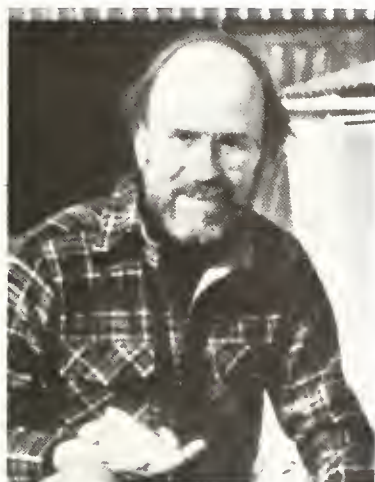
Pressure Generation and Stability of Compacting Sediments, (In preparation); "The Thermal State of the Earth's Lower Mantle and Core, Journal of Geophysical Research, (In preparation). "The Melting Point and Adiabatic Gradients at High Pressures," was presented at the American Geophysical Union Meeting in San Francisco in December 1981 and "Pressure Generating Mechanisms in Compacting Sediments was presented at Chevron Oil Field Research Company.

Back in 1971, Correspondence Chess became a hobby that has continued over the years with the outcome being that Palciauskas is now one of three finalists in the Tenth World Correspondence Chess Championships with the playoff occurring this summer.

This year's teaching schedule included Mathematical Methods in Geology (Geology 480 and Seminar in Geophysics for Advanced students in the Fall semester with Transport Processes in Geology (Geology 481) and Environmental Physical Science (Geology 143) during the Spring semester.

Publications and talks during 1981-82 included: "Characterization of the Drained and Undrained Response in Thermally Loaded Repository Rocks", with P. A. Domenico published in the Journal of Geophysical Research, Water Resources Research, 1982; "Alternate Boundaries in Solid Waste Management," with P. A. Domenico in Groundwater, 1982; "The Melting Point and Adiabatic Gradients at High Pressures, Physics of the Earth and Planetary Interiors, (In review); "The Role of Illite-Smectite Transformation on Excess





B.S. 1960, M.S. 1961, Louisiana State University; F.I. License, 1964, F.I. Doctor, 1965, University of Stockholm, Historical Geology

Carbonate Sedimentology;  
Micropaleontology

Phil has taken Sabbatical for Spring, 1982 at the Institut für Geologie und Paläontologie, Philipps-Universität, at Marburg, West Germany. His efforts there have been divided between writing up current research for publication and preparation of text and illustrations for a reference work on ultrastructure and diagenesis of limestone constituents. It is difficult to exactly determine how time will be apportioned; the two efforts are very much intertwined. The results of his current research form a large part of the data base for the intended book.

He is text writing and having consultations with European specialists on diagenesis and fine structure of nonskeletal grains and skeletons of various taxa. He plans to consult with individuals in Germany, United Kingdom, France, the Netherlands, and Scandinavia.

Collections in hand include 1600+ samples of limestones of many ages (Cambrian to Recent) and modern skeletons and ooids from localities throughout the world, many already thin sectioned, some studied by SEM.

Phil has consulted with colleagues at various German Universities (Bochum, Erlangen, Tübingen, Köln, Berlin, Göttingen) and in France (Orsay and Musée d'histoire naturelle, Paris), England (Liverpool, Newcastle, Leicester and British Museum, Natural History, London), and Sweden (Stockholm and Uppsala) on aspects of carbonate sedimentology and diagenesis.

Lectures have been presented at Erlangen, May 1982 ("Aragonit und Kalzit im Laufe der Erdgeschichte") and Tübingen (1st in der Karbonatsedimentologie die Gegenwart wirklich ein zuverlässiger Schlüssel für die Vergangenheit?")

He held a seminar in Carbonate Diagenesis in the Spring of 1982 at the Phillips-University of Marburg, and also taught a Sedimentary Petrography Lab in the Spring of 1982 with Prof. Dr. H. Zankl at Phillips-University, Marburg.

Field excursions were in the Jurassic of the Paris Basin (with Prof. Bruce Purser, Orsay), in the Jurassic of Yorkshire (with Prof. Maurice Tucker, Newcastle) and the Bath region, in the Triassic of the Alps (with Prof. H. Zankl, Marburg, and Dr. Christian Dullo, Erlangen, in the Permian of the Harz Mountains (with Prof. Joseph Paul, Göttingen).

Before leaving for Sabbatical, Phil served on the Department Admissions Committee and taught Geology 102 (History of the Earth) and Geology 493 W1 (Advanced Studies in Geology), and was graduate advisor for Brian N. Popp.

GEORGE W. WHITE  
Professor Emeritus



A.B. 1921 Otterbein College  
M.A. 1925 Ohio State Univ.  
Ph.D. 1933 Ohio State Univ.

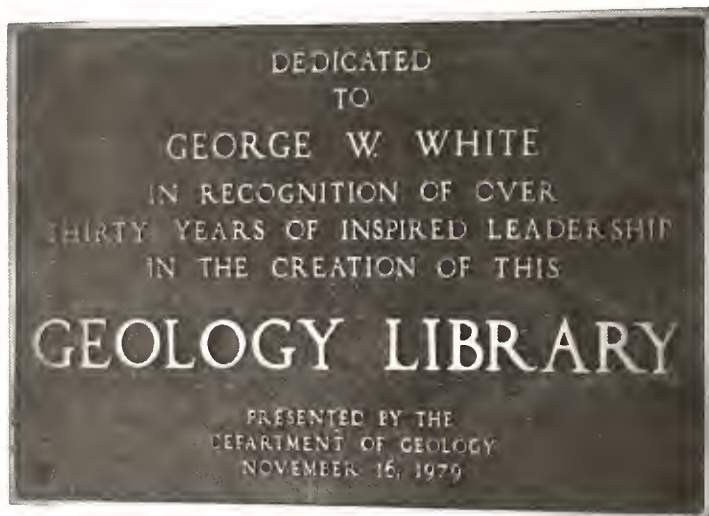
Glacial Geology; History of Geology

plaque which was presented to George in 1979 recognizing his leadership in the creation of the Geology Library could be seen more clearly by anyone entering the front hall of the library. The illumination not only makes the plaque more attractive, it also has made the whole area a brighter place to be.

Dr. White has continued to actively support the Alumni Newsletter effort by supplying information and ideas. Although his time in the office has been limited this year he has published an essay "Andrew Ellicott's Geological Observations in the Mississippi Valley and Florida, 1796-1800", pages 9-25 in *The Geological Sciences in the Antebellum South*, University of Alabama Press, 1982. This paper was given at the Birmingham Meeting of the Geological Society of America in 1980 at a Symposium organized by James X. Corgan who edited the volume of papers.

A monograph on glacial geology of Northeastern Ohio is ready for the printer as Bulletin 68 of the Geological Survey of Ohio. It includes a large colored map of all fifteen counties.

The Geology Department recently had lighting installed so that the



## VISITING RESEACHERS



Mrs. Maria Muisa Cafferata received an M.S. degree in geology from the University of La Plata in 1976 and a specialization in petroleum geology in 1977 from the University of Buenos Aires. That same year she joined the research laboratory of Yacimientos Petroliferos Fiscales, the National Oil Company of Argentina where she specialized in carbonate petrology. She did several projects in association with Dr. A. V. Carozzi who acted as a foreign adviser to Y.P.F.

She came to this Department for a semester as a visiting research associate to increase her knowledge in

carbonate petrography and in the preparation of depositional models for oil exploration. Besides taking great advantage of our unique library and taking a few courses she studies numerous suites of carbonate rocks from all over the world that are in Carozzi's collection and developed related models of deposition. Upon her return to Argentina in June 1982 she will assume the direction of the section of the research laboratory dealing with exploration for oil in carbonate rocks.



Mr. Chen-Yun Yang came to us for a year as a visiting scholar from the University of Peking where he has taught mineralogy and sedimentary petrography for several years as a lecturer in the Department of Geology. His textbook "Optical Mineralogy" was published by the Geology Press of China in 1979 and is in standard use throughout the Peoples Republic of China. Recently he also published another volume "Fieldwork in Petrographic Provinces" a study of petrography applied to regional geology.

During his stay with the Department he is taking courses and particularly is involved with Professor Carozzi in the preparation of a bilingual English-Chinese textbook entitled "Atlas of systematic study of carbonate microfacies" which will be an illustrated introduction to carbonate rocks petrography and paleoecology, an entirely new subject for Chinese geologists.



## COLLOQUIUM PROGRAMS

The Department of Geology continued its tradition of inviting outstanding scientists to present lectures at our weekly Colloquium Series. Professor Thomas F. Anderson was responsible for the Colloquium schedule during the 1981-82 year; as a consequence, the topics had a decided geochemical accent. In addition to speakers from outside the Department, we were fortunate to have a number of excellent lectures presented by departmental faculty members and Ph.D. candidates completing their dissertations. Special thanks are due all members of the Department you contributed to the success of the Colloquium Series this year, particularly Laura Harbison, the Colloquium Secretary.

September, 1981

- 4 - DR. JEFFREY V. TURNER (Post-doctorate), "Environmental Isotopes in Studies of Lake-groundwater Relations: Reference to Blue Lake, South-eastern Australia."
- 11 - DR. THOMAS F. ANDERSON (Faculty Member), "The Stable Isotope Record of Calcareous Nannoplakton."
- 18 - PROF. PAUL POTTER (Dept. of Geology, Univ. of Cincinnati, Ohio), "Plate Tectonics and the Most Noble of all the Continents."
- 25 - PROF. EUGENE C. PERRY (Dept. of Geology, Northern Illinois University at DeKalb), "Stable Isotope Relationships in Northern Illinois Groundwaters."

October

- 2 - PROF. YUCH-NING SHIEH (Dept. of Geosciences, Purdue University, West Lafayette, Indiana), "Oxygen Isotope Study of Granites and its Bearing on the Evolution of the Canadian Shield."
- 9 - PROF. ANDREW C. SCOTT (Dept. of Geology, Chelsea College, University of London), "The Development of Late Paleozoic Terrestrial Ecosystems."
- 16 - PROF. ENRIQUE MERINO (Dept. of Geology, Indiana University at Bloomington), "Kinetic Theories of Differentiated Layering and Stylolitization in Stressed Rocks."
- 23 - DR. FRED T. PRICE (Exxon Production Research Company, Houston, Texas), "Development of a Geochemical Model for the Origin and Distribution of Sulfur in Coal."
- 30 - DR. GLEN S. VISHER (Pres., Geological Services & Ventures, Inc., Tulsa, Oklahoma), "Log Probability of Grain-size Distributions -- a Reprieve."

November

- 13 - DR. GARRETT W. BRASS (Div. of Marine Geology and Geophysics, Rosenstiel School of Marine and Atmospheric Sciences, Univ. of Miami, Florida), "Warm Saline Bottom-water in Ancient Oceans."
- 20 - DR. KEROS CARTWRIGHT (Illinois State Geological Survey, Champaign), "Hydrogeology of Glacial Terranes in the Great Lakes Region."
- 24 - DR. WILLIAM W. SHILTS (Section Head, Terrain Sciences Division, Geology Survey of Canada), "Glacial Dispersal Centers and Marine Incursions in the Hudson Bay Region - Redefinition of the Laurentide Ice Sheet."

December, 1981

- 4 - PROF. STEPHEN GUGGENHEIM (Dept. of Geological Sciences, Univ. of Illinois at Chicago Circle), "Serpentine Mineralogy."

January, 1982

- 22 - PROF. SETH STEIN (Dept. of Geological Sciences, Northwestern University, Evanston, Illinois), "Earthquakes on Oceanic Plates."
- 29 - DR. THOMAS CROUGH (Dept. of Geosciences, Purdue University, West Lafayette, Indiana), "Hot Spots, Kimberlites, and Crustal Uplift."

February

- 3 - DR. YONG AHN PARK (Chmn., Dept. of Oceanography, Seoul National University, Korea), "Transport and Dispersal of Suspended Sediments in the Inner Continental Shelf on the Deum River Estuary, South Korea."
- 5 - DR. PAUL BAKER (Dept. of Geology, Duke University, Durham, North Carolina), "Diagenesis of Deep-Sea Carbonate Sediments."
- 12 - DR. PATRICK DOMENICO (Faculty Member), "Some Consequences of the Overpressured Thermal Environment: Primary Migration in Sedimentary Basins and the Potential Instability of Geologic Repositories."
- 19 - DR. RALPH L. LANGENHEIM (Faculty Member), "Geology and Other Things: Republic of China, Fall, 1981."
- 26 - DR. W. HILTON JOHNSON (Faculty Member), "The Periglacial Environment in Illinois: Did Permafrost Develop?"

March

- 5 - DR. JEFFREY HANOR (Dept. of Geology, Louisiana State University at Baton Rouge), "Controls on Early Carbonate Diagenesis in Zones of Mixing of Meteoric and Marine Waters."
- 12 - DR. DAVID RUSSELL (Ontario Geological Survey), "Surface Crater Formation Over Solution Mining Operations in the Windsor-Detroit Waters."
- 26 - DR. MICHAEL ARTHUR (Univ. of S. Carolina at Columbia), "Possible Fluctuations in the Ocean Geochemical Scycle of Phosphorous and the Origin of Phosphorite Giants."

April

- 2 - DR. PETER A. SCHOLLE (U.S. Geological Survey, Denver), "Carbonate Isotopic Composition of Sea-Water Carbonate Through-Time."
- 9 - DR. CORNELIS KLEIN (Dept. of Geology, Indiana University at Bloomington), "Precambrian Banded Iron Formations: Their Mineralogy/Petrology and Possible Significance."
- 16 - PROF. BRYAN GREGOR (Wright State University, Dayton, Ohio), "Cyclic Processes in Geology - Evolution of the Idea."
- 23 - PROF. SEYMOUR M. SCHLANGER (Northwestern University, Evanston, Illinois), "Cretaceous Mid-Plate Vulcanism in the Pacific Basin."
- 30 - PROF. M. NAFI TOKSOZ (Dept. of Earth and Planetary Sciences, M.I.T.), "Space-time Migration of Seismicity and Earthquake Predictions."



## GEOLOGY CLUB

The 1981-82 Geology Club had an interesting and productive year. The first event was an organization meeting where officers were elected. The first lecture was about "The advantages of being an independent in the Oil and Gas Industry" given by Dr. Glenn S. Visher. Dr. Visher expanded on graduate school, mud logging and the industry. A following talk by faculty member Dr. D. M. Henderson discussed graduate school and other post graduation alternatives.

Once again the Geology Club participated in the Prairie State Gem and Mineral Society Rock Show at a local shopping center. The club prepared a display of minerals and fossils and answered questions about the science of geology for the curious passers-by.

A grade school teacher, who was at the time teaching her class about dinosaurs, asked the club for someone to speak to her class and present dinosaur fossils. Senior Sean Bloom went to the school with dinosaur vertebra and footprints. The children enjoyed it immensely.

A proposed field trip to the Southern Appalachias over Spring Break had to be cancelled because of lack of funding. The final planned activity of the year was a one-day canoe trip at Turkey Run on the day before graduation, so that half of the members graduated with sunburns and smiles on their faces. We've had a good year and hope that our successors will have one as well.

### Membership

Jeanine Balsamo, Sean Bloom, Marge Burns, Theresa Brandabur, Joan Crockett, Kevin Davis, John Fitzgerald, John Fox, Sharon Geil (Treasurer), Terri Gierlowski, Steve Greb, Laura Harbison (Honorary Secretary), John Kruger, Rik Lantz (president), Dan Plomb, Scott Mansholt, Mike Meyer, Meg Saunders, and Dave Thiel.



(L-R) ROCK SHOW  
*Theresa Brandabur and Laura Harbison*



(L-R) CANOE TRIP  
*Gary Foote, Chris Kaszycki, Rik Lantz  
Ronald Sturm, John Kruger, Stephen Greb*

## CURRENT GRADUATE STUDENTS

ALTANER, STEPHEN P. - BA, Colgate University

Received University of Illinois Graduate College Fellowship and Exxon Fellowship

Paper submitted to Science: The Role of Potassium Metasomatism and Diffusion in the Origin of a Zoned K-bentonite from the Disturbed Belt, Montana.

Presented at 1981 Clay Minerals Conference: The Role of Potassium Metasomatism in the Origin of the Zoned K-bentonite from the Disturbed Belt, Montana.

BAKUSH, SADEG H. - BS, University of Tripoli; MS, Ohio State

BARROWS, MARY H. - BS, University of Illinois

BERTANI, RENATO T. - BS, University Federal do Rio Grande do Sul

BIELER, DAVID B. - BA, Oberlin College; AM, Dartmouth College

Taught Structural Geology as Visiting Lecturer which included a field trip to Baraboo, Wisconsin

Presented at the NE/SE GSA Meeting in Washington, D.C.: Timing of Events in Avalonian Elements: Evidence from Anglesey, North Wales

BONNELL, LINDA M. - AB and MS, University of Illinois

CLUFF, ROBERT H. - BS, University of California; MS, University of Wisconsin

COLTEN, VIRGINIA A. - BA, DePauw University; MS, Louisiana State University

Student Advisory Committee Representative

DAWSON, WILLIAM C. - BS, University of Illinois; MS, University of Texas

Teaching Assistant in General Geology, Geology for Engineers, and Introduction to Sedimentary Petrography

Thesis field work in southeastern Kansas.

Published the following papers:

Rhizocorallium in the Upper Austin Chalk: Ellis County, Texas. Texas Journal of Science, v. 32, p. 207-214.

Late Cretaceous Tides: Physical Evidence from the Lower Wolfe City Sandstone, Ellis Co., Texas: GSA Abstracts, v. 13/5, p. 235 (San Antonio, Texas).

Secondary Burrow Porosity in Quartzose Biocalcarenes: Carbonate Symposium, VIII Geologic Congress of Argentina, San Luis, Actas II, p. 637-649.

Emendation of the Pecan Gap Chalk (Campanian) in NE Texas: Transactions of the Gulf Coast Association of Geological Societies, v. 31, p. 353-358.

DEMIR, ILHAM - BS, Hacettipe University

DIABY, IBRAHIMA - BS, Oregon State University; MS, University of Illinois

Teaching Assistant for Environmental Physical Science and Mineralogy-Petrology

Participated in Florida Field Course and thesis related field work in the Illinois Basin (Kentucky, Indiana, Illinois) on the St. Louis Limestone

Presented and Published the following:

Carozzi, A. V. and Diaby, Ibrahima, Microfacies and Depositional Model of the Salem Limestone (Middle Mississippian), Southwestern Illinois, USA, VIII Congreso Geológico Argentino, Actas II, pp. 435-457. (M.S. Thesis)

Presented at the VIII Geological Congress of Argentina

ELSBREE, HOPE C. - BA, Smith College

FEIZNIA, SADAT - BS, University of Tehran; MS, University of Illinois

Teaching Assistant for General Geology and Environmental Physical Science  
Participated in Grand Canyon Field Trip, Field Trip to Ozark Mountains and Field Trip to Eastern Kentucky.

Thesis field work in Illinois, Kentucky and Indiana

Published the following:

Feiznia, S. and A. V. Carozzi, 1981, Microfacies and Depositional Environment of the Glen Dean Formation (Upper Mississippian) Southwestern Illinois, U.S.A., In: Acta Octavo Congre, Geol. Argentina, Vol. 2, p. 459-487.

FERRETIZ, JORGE L. - BS, The Autonomous University of San Luis Potosi

FIELLO, SUSAN C. - BS, University of Illinois

FOOTE, GARY R. - AB, Hope College

FOX, JOHN M. - BS, Southern Illinois University

Participated in field trips to Madison County, IL and Baraboo, WI

FRYER, KAREN H. - BA, Wellesley College; MS, University of Illinois

GOLDSTEIN, STEVEN J. - BS. University of Illinois

HACKLEY, Keith C. - BS, Pennsylvania State University

HASKIN, MARK A. - BA, Florida Institute of Technology

HAYDON, PAUL R. - BA, UCLA; MS, San Diego State University

HORTON, DUANE G. - BS and MS, Western Washington State College

HUFF, BRYAN G. - BS, University of Illinois

Teaching Assistant for Structural Geology, Mineralogy-Petrology and the Wyoming Field Camp

HUTASOIT, LAMBOK M. - BS, Institute of Technology Bandung

ILGENFRITZ, DEBORAH L. - BA, College of William and Mary

JOHNSON, THOMAS A. - BS, Augustana College; MS, University of Wisconsin

KASZYCKI, CHRISTINE - BA, Carleton University

Graduate Student Representative to Geology Advisory Committee

KIM, HYE SUN - BS, Seoul National University

KNOWLTON, POLLY L. - BS, University of Massachusetts; MS, University of Illinois

Received Avery Boondage Athletic and Academic Scholarship, American Association of University Women Educational Foundation Dissertation Fellowship and TA Excellence Award

Founder, Captain, Coach, and Manager of the Geology Department Soccer Team for four years

KUO, LUNG-CHUAN - BS, National Taiwan University; MS, University of Illinois

Papers published:

Kirkpatrick, R. J., Kuo, L. -C. and Melchior, J. (1981) Crystal growth in incongruently-melting compositions: programmed cooling experiments with diopside. *Amer. Min.*, 66, 223-241.

Kirkpatrick, R. J., Kuo, L. -C. and Melchior, J. (1982) Nucleation and growth of plagioclase in programmed cooling experiments. (in preparation)

Kirkpatrick, R. J., Reck, B. H., Kuo, L. -C. and Pelly, I. Z. (1982) Programmed cooling experiments in the system  $MgO-SiO_2$ . (in preparation)

Kuo, L. -C. and Kirkpatrick, R. J. (1982) Small-angle X-ray scattering study of pre-nucleation behavior of titanium-free and titanium-bearing diopside glasses. *Amer. Min.* (in press)

Kuo, L. -C. and Kirkpatrick, R. J. (1982) Pre-eruption history of phyric basalts from DSDP Legs 45 and 46: evidence from morphology and zoning patterns in plagioclase. *Contrib. Mineral. Petrol.* (in press)

LARSON, TIMOTHY H. - BS, Wheaton College; MS, Northern Illinois University

LASEMI, ZAKARIA - BS, Pahlavi University

LAUBACH, STEPHEN E. - BS, Tufts University

Chief Teaching Assistant for Introductory Geology and Mineralogy/Petrology  
Teaching Assistant for Wyoming Field Camp (1981) and the British Isles Field Camp (1982)



LEE, YONG IL - BS and MS, Seoul National University

LEPZELTER, CAROL G. - BA, SUNY Queens College; MA, Boston University

MATTHEWS, PETER K. - BS (Geology), BA (Math), Washington State University  
Chief Teaching Assistant for Geology for Engineers

MILLS, PATRICK C. - BA, Emory University; M.Ed., Georgia State University

MORSE, WALTER J. - BS, Illinois State University

OESTRIKE, RICHARD, JR. - AB, Franklin and Marshall

OKHRAVI, RASOOL - BS and MS, University of Tehran; MS, University of Illinois

OU, JOYCE LING-MEI - BS, National Taiwan University

OWEN, MICHAEL R. - BA, Earlham College; MS, University of Illinois  
Teaching Assistant for Geology for Engineers, Sedimentology, and  
Principles of Stratigraphy  
Participated in field trip to Southern Illinois  
Abstract - "Seasonal Sedimentation in a Late Precambrian Lake: Rhythmites  
of the Port Askaig Tillite". Accepted by International  
Association of Sedimentologists.  
Attended G.S.A. Penrose Conference on the Ouachita Orogeny

POPP, BRIAN N. - BS, University of Michigan; MS, University of Illinois  
Serving on the Committee on the Advancement of the Spring Banquet  
Papers published and or presented at meetings:  
\*Philip A. Sandberg and Brian N. Popp, 1981, Am. Assoc. Petrol. Geologists  
Annual Meeting San Francisco, CA. Talk entitled "Pennsylvanian  
Aragonite from Southeastern Kansas--Environmental and Diagenetic  
Implications".  
\*Brian N. Popp, Philip A. Sandberg, and Thomas F. Anderson, 1981, Geol.  
Soc. Am. Annual Meeting Cincinnati Ohio Talk entitled "Coordinated  
Textural, Isotopic, and Elemental Analyses of Constituents in Some  
Middle Devonian Limestones"

\*Speaker

RODRIGUEZ, NANCY M. - BA, Wellesley College

SCHORDT, JOSEPH K. - BA, University of Missouri; MS, University of Illinois

SMITH, LAURA A. - BS, Rensselaer Polytechnic Institute  
Teaching for History of the Earth, General Geology 1, Physical Science in  
Modern Society, and Environmental Physical Science  
Participated in field trips to Arkansas & Oklahoma, Missouri, Indiana, and  
Clinton Power Plant



STECYK, AMY N. - BS, University of Illinois

STERNBERG, ANN C. - BS, University of Wisconsin

STUMP, PETER - BS, Richard Stockton State College

SU, WEN-JUNE - BS, College of Chinese Culture, MS, National Taiwan University

SWEET, MICHAEL L. - BS, University of Wisconsin, Madison

TARGOS, KATHLEEN A. - BA, Northwestern University

TREWORGY, JANIS D. - BS, Principia College

VAIDEN, ROBERT C. - BA, Rockford College

VERGO, NORMA - BA, Colgate University

Paper Published:

Interstratified Clay Minerals in Contact Aureoles, West Rock, Connecticut,  
1982, Clays and Clay Minerals.

VON BERGEN, DONALD - BS, Wheaton College

Teaching Assistant for An Introduction to the Study of the Earth and Chief  
Teaching Assistant for General Geology, II.

WEIBEL, CARL P. - BS, University of Wisconsin

WESTGATE, LINDA M. - BS, University of Missouri

Poster Session "Stable Isotope Evidence for the Origin of Sulfur in Coal"  
at 1981 Annual GSA Meeting

WOLFF, BRENO - BS, Universidade Federal do Rio Grande do Sul

## DEGREES GRANTED

### Bachelors

ADAMS, STEPHEN VANCE

BRENNECKE, STEVEN MYLES

CONNOR, CHARLES BENJAMIN

COVINGTON, THOMAS EDWARD

DURBIN, MICHAEL LENNIS

ESSER, JOHN STUART - Magna Cum Laude

FLETCHER, CRAIG ROBERT

GREB, STEPHEN FRANCIS

HARTNEY, MICHAEL F.

HODGSON, PHILIP RICHARD

HOLLENSBE, GLEN DEAN

HOSKINS, MARTHA GAIL

KWOLEK, JAMES MICHAEL

Thesis, "Early Atokan Brachiopods, Unit N-4, Bird Spring Group,  
Arrow Canyon, Clark County, Nevada

LANTZ, RIK E. - Distinction

Thesis, "The Presque Isle Serpentinized Peridotite -  
A Chemical and Petrographic Study"

MANSHOLT, MICHAEL SCOTT

Thesis, "Petrography and Petrology of Tuff Beds in the Wamp Spring Area  
in the Las Vegas Range, Clark County, Nevada

MOFFETT, DAVID LEE

RECK, BRIAN HARRISON - Summa Cum Laude - Distinction

SCHENCK, LESLIE READE

Thesis, "An Early Atokan Brachiopod Faunule, Bird Spring Group, Arrow Canyon,  
Arrow Canyon, Clark County, Nevada

SLAGLEY, SCOTT ARTHUR

STROM, THORSTEN A.

STURM, RONALD DUANE

TOMEI, JAMES GREGORY

WYLD, SANDRA JEANNE - Cum Laude

## **Masters**

ADAMS, LESLIE E. (May 1982) - no thesis (Domenico)

HARTLINE, LAURIE E. (October 1981) - "Illinoian Stratigraphy of the Bond County Region of West Central Illinois" (Johnson)

HEINRICH, PAUL V. (May 1982) - "Geomorphology and Sedimentology of Pleistocene Lake Saline, Southern Illinois" (Johnson)

LEE, CHUNG-I (January 1982) - "Stress Condition in Direct Shear Test" (Nieto)

LIPMAN, ERIC (May 1982) - "Systematics, Biostratigraphy and Paleoecology of Missourian and Virgilian Brachiopods of the Bird Spring Group, Arrow Canyon, Arrow Canyon Range, Clark County, Nevada" (Langenheim)

MARSAGLIA, KATHLEEN M. (May 1982) - "Petrography, Provenance, Depositional Environment, and Diagenesis of the Basal Salina Formation (Lower Eocene) Northwest Peru" (Carozzi)

PEARSON, CORINNE D. (October 1981) - "Selective Silicification of Skeletal Carbonates in Some Mississippian and Devonian Limestones" (Sandberg)

POPP, BRIAN N. (October 1981) - "Coordinated Textural, Isotopic, and Elemental Analyses of Constituents in Some Middle Devonian Limestones" (Sandberg/T. F. Anderson)

## **Doctorals**

BABB, ROBERT F. (October 1981) - "A Study of Compositional Zoning in Garnets from the Ducktown Mining District, Tennessee: Implications for Mathematical Modelling of Garnet Growth" (D.E. Anderson)

BENZEL, WILLIAM M. (May 1982) - "The Effect of Smectite Layer Thickness and Fabric Upon Salt Filtration at Room Temperature" (Graf)

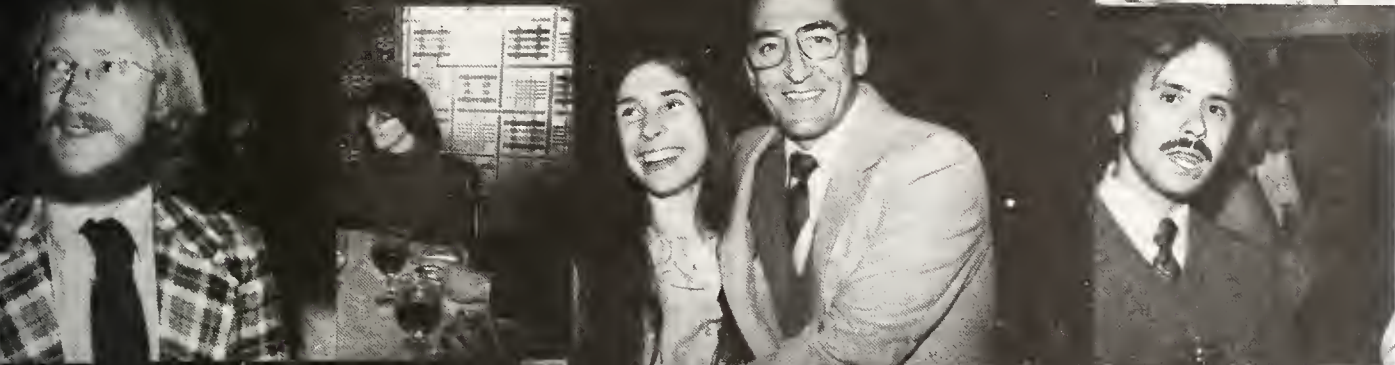
GUENSBURG, THOMAS E. (January 1982) - "Echinodermata of the Middle Ordovician Lebanon Limestone, Central Tennessee" (Blake)

KLASSEN, RODNEY A. (January 1982) "Quaternary Stratigraphy and Glacial History of Bylot Island N.W.T., Canada" (Johnson)











## 477 FIELD TRIP

Costs underwritten by the Getty Oil Company

The problem of funding the increased costs of graduate field trips to key geological areas continues to be faced in the department. Geology 477, Recent Sedimentary Environments, taught by Dr. George deVries Klein, traditionally includes a six day field trip examining the depositional systems of Carboniferous age in the Ouachita Fold Belt and the Arkmoa Basin of Arkansas and Oklahoma. There, one can examine unusually well-exposed three-dimensional outcrops through a transect from fluvial, deltaic, tidal flat, beach-barrier, intertidal sand body, and deep-water submarine fan systems; in short a transect from paleo-continent to paleo-ocean.

In the Fall of 1981, preliminary cost estimates indicated that this field trip would cost each student participant about \$125.00, plus an additional \$35.00 for camping fees and food. As in 1980, this field trip was underwritten by the participation of an oil company which sent two recent hires on the trip as part of their company training program at the standard industry short course fee. The supporting company this past year was the Getty Oil Company. This support was arranged with the assistance of Mr. Gary Meyer of the Getty Oil Company, who came to campus to recruit students. The Getty Oil Company participants were Mr. Charles Campbell (Purdue Graduate) and Mr. David Reeves (a McMaster University Graduate) from Oklahoma City.

## THANK YOU

for your gift to the Geology Department Alumni Foundation Fund

Agnew, Dr. Allen F., Corvallis, Oregon  
Bozeman, Mr. John R., Oklahoma City, Oklahoma  
Exxon Education Foundation, New York, New York  
Foss, Mr. Ted. H., Friendswood, Texas  
Grossman, Dr. Stuart, Houston, Texas  
Inco United States, Inc., New York, New York  
Quirke, Dr. Terence T., Jr., Golden, Colorado  
Ringler, Mr. Robert W., Helena, Montana  
Scott, Dr. Alan J., Austin, Texas  
Shell Companies Foundation, Houston, Texas  
Threet, Mr. Jack C., Houston, Texas  
White, Mr. George W., Champaign, Illinois  
Williams, Mr. Norman, E., Chelmsford, Maine  
Winkler, Mr. Virgil D., Caracas, Venezuela

## ALUMNI NOTES

ALLEN F. AGNEW  
A.B. 1940  
M.S. 1942  
Ph.D. (Stanford)

Corvallis, Oregon. "Having retired from the Federal Government on December 14, I'll enjoy Corvallis' mild, moist weather with F.F.F. (Favorite Frau Fran) in our new house for three weeks before heading for Austin--where I'll be Visiting Professor of Geology for the Spring Semester. It should be fun again to join students in a mutual exchange of ideas in my graduate seminar on 'Geology and Public Policy.' My required course in geology for sophomore civil engineers and undergrad petroleum business majors sounds like work, though. I'm looking forward to the Alumni Directory."

STEPHEN M. BORN  
B.S. 1961  
M.S. (Oregon)  
Ph.D. (Wisconsin)

Madison, Wisconsin. "Have been here in Madison since 1969, never expecting to remain this long in the snow belt. After a four-year stint (1974-77) as State Planning and Energy Director under Wisconsin Governor Patrick Lucey, I returned to the University where I have been working in the area of natural resources and environmental planning and public policy."

MARGARET BOWMAN  
A.B. 1948

(Helen Margaret Storm) Oak Park, Illinois. "My work is far removed from geology these days. During the past ten years, I have become involved in embroidery and patchwork as a teacher, lecturer, designer and artist. Pursuing these interests, I lived in England from 1979 to 1980, studying with various fiber artists and qualifying for certificates in design and embroidery from Loughborough College of Art and Design and in adult teaching from the University of Nottingham. I'm back home for good now and look forward to travel in the U.S. and Britain for teaching and recreation."

BARBARA J. COLLINS  
B.S. 1951  
M.S. 1953  
Ph.D. 1955

(Barbara Jane Schenck) Thousand Oaks, California. "I am still teaching at California Lutheran College in the Biology Department and last year had the opportunity to travel with students to Australia and New Zealand during an interim field course."

LORENCE COLLINS  
B.S. 1953  
M.S. 1955  
Ph.D. 1959

Thousand Oaks, California. "I have returned to full-time teaching in the Geological Sciences Department at California State University-Northridge after serving ten years as the Research Coordinator for the University. I am now continuing my research on 'myrmekite'."

GEORGE V. COHEE  
B.S. 1931  
M.S. 1932  
Ph.D. 1937

Bethesda, Maryland. "I have retired from the U.S.G.S. five years ago at the age of seventy."

GEORGE H. DAVIS  
B.S. 1942

Silver Spring, Maryland. "I retired from federal government service as Assistant Director - Resource Programs, U.S. Geological Survey in January 1981. Now occupied with consulting in the water and energy fields, as editor of the Journal of Hydrology, serving on a National Academy of Science committee, and as an officer of the Geological Society of America-Hydrogeology Division and the International Water Resources Association."

WILLIS M. DECKER  
B.S. 1939

Tulsa, Oklahoma. "After leaving the University of Illinois in 1939, I went to work for Cities Service Company. I spent thirty-nine years with Cities Service Company and took early retirement in 1978 to work for Jet Oil Company. We are very active in drilling wells. In 1981 we drilled forty-eight wells in Oklahoma and Texas and plan to drill about that many in 1982."

FRANK LAWRENCE DOYLE  
B.S. (Texas)  
M.S. (Louisiana)  
Ph.D. 1958

(Larry) Gaithersburg, Maryland. "Manages the hydrogeological research program for high level waste for the Nuclear Regulatory Commission."

JOHN J. FRANCIS  
B.S. 1979

Loa, Utah. "I had been employed since June 1981, by Sancana Inc. as a Consulting Petroleum Geologist. My new career is that of Consultant Geologist for Sancana Inc., Denver, Colorado."

NORMAN E. HAACK  
B.A. (Whittier)  
M.S. 1956

Springfield, Virginia. "I received a M.S. '56, then was employed for a short period with Standard of Texas before entering active naval service. After a lengthy career, I plan retirement from the active Navy this year and am seeking job opportunities associated with petroleum geology."

MILTON F. LANGER  
B.S. 1951  
M.S. 1955

Colonel in the U.S. Army Reserves with an assignment to the Research and Development Office of the Corps of Engineers, Washington, D.C. Reserve Active Duty assignments have been to Cold Regions Engineering Lab., Hanover, New Hampshire, Atmospheric Science Lab., White Sands, New Mexico and Washington, D.C.

RAYMOND F. MCALLISTER  
B.S. (Cornell)  
M.S. 1951  
Ph.D. (Texas A & M)

Deerfield Beach, Florida. "Special efforts at science education of layment. Consulting in marine environmental areas, marine surveys and underwater (SCUBA diving observations). I have three children, Keith, Kevin and Karen. I still scuba dive every weekend along Florida and Bahama coasts."

HAYDN H. MURRAY  
B.S. 1948  
M.S. 1950  
Ph.D. 1951

Bloomington, Indiana. "I was elected to the GSA council for three years, 1982-1985 at the past meeting in Cincinnati. Also, I was elected Chairman of the Industrial Minerals Division of AIME for 1982 and to the board of directors of the Society of Mining Engineers for 1982-1985.

R. WILLIAM ORR  
B.S. 1962  
M.S. (Texas)  
Ph.D. (Indiana)

(Bill) "Was appointed Chairman of the new Department of Geology, Ball State University, Muncie, Indiana in October of 1981. Due to increasing enrollment in Geology, the Board of Trustees separated the old Department of Geography and Geology into distinct departments."

JUDY PAPESH  
B.S. 1981

Englewood, Colorado. I am working for Petty-Ray and so is Sarah Volungis. We are both working as seismologists, processing data for various clients. I am primarily involved with projects for Getty Oil and Sarah is working with Placid Oil.

Petty-Ray is a division of Geosource Inc., a Fortune 500 Company (#381). The Rocky Mountain Data Center (where we work) is responsible for data shot in the Rockies and western U.S. Geosource has offices and field crews all over the world. Other operations include manufacturing of geophones, Vibroseis trucks and other field instruments, as well as providing seismic processing services and computer software (TEMPUS system) specifically designed to process seismic data.

DAVE RICH  
B.S. (Notre Dame)  
M.S. 1977  
Ph.D. 1980

Englewood, Colorado. "After leaving Illinois in October 1979, we went to Houston, where I worked the Arkoma Basin and Ouachita Mountains of Oklahoma. This included some field work, and I enjoyed Shell's excellent training program, while Toni and Jenny battled roaches bigger than the one that ran up my leg in N.H.B. We were all pleased in January 1981 when I accepted a job with Sabine Production Company in their newly-formed Rocky Mountain Division Office in Denver. We bought a house in Englewood (although we have not yet sold the one in Houston) and have been thoroughly enjoying the mountains."

RON RICHMAN  
B.S. 1980

Berkeley, California. "Am presently working toward an M.S. Civil Engineering Geotechnical/Geological Engineering. Will graduate June 1982. Have worked for San Francisco district Army Corps of Engineers at Warm Springs Dam and Alameda County Water Conservation. As the former, I was working on the geology for the foundation report, and construction inspection. At the later I analyzed geologic and hydrologic data as part of an effort to perfect a finite element groundwater model of the Livermore Valley Basin."



JOHN L. SHEPARD B.S. 1980	New Orleans, Louisiana. "I will be married to Miss Kathryn L. Holman of New Orleans on May 15, 1982."
JOHN D. SIMS B.S. 1963 M.S. (Cincinnati)	Menlo Park, California. "Am currently employed in the Branch of Earthquake Tectonics and Risk Analysis of the U.S.G.S. in Menlo Park, California. Project Chief of two projects: 1) detailed geologic investigations, central San Andreas Fault Zone, and 2) Quaternary Reference cone, Clear Lake, California. Both projects deal with aspects of Late Cenozoic tectonically controlled sedimentation and stratigraphy. In recent years I have devoted a major part of my research time to the study of lacustrine sediments and am organizing a symposium and volume on Clear Lake, California."
JOHN B. VERCELLINO B.S. 1956	Corpus Christi, Texas. "Exxon-- Chief Production Geologist, Houston, Texas. Recruited at the University of Illinois for Geology and Geophysics October 22-23, 1981."
JEROME P. WALKER B.S. (Indiana) M.S. 1975	(Jerry) Denver, Colorado. "Was named Vice-President, Geology for Sterling Energy Corporation in August, 1981. Sterling is a new exploration company, located in Denver, Colorado, and active in Kansas, Colorado, Wyoming, and the Overthrust Belt of Idaho-Utah-Wyoming. Since graduation from Illinois I have worked for Texaco, Champlin Petroleum Company, and American Quasar Petroleum Company, prior to Sterling, and all in Denver."
WILFORD F. WEEKS B.S. 1951 M.S. 1953 Ph.D. (Chicago)	Lebanon, New Hampshire. "In 1979 was elected to the National Academy of Engineering. During the 1979-80 academic year I was the Office of Naval Research Professor of Arctic Marine Sciences at the Naval Postgraduate School in Monterey. In 1981, I was awarded the Department of the Army Research and Development Achievement Award for work in developing a geophysical basis for offshore engineering in the polar oceans. He is currently participating in a variety of field programs in the Bering, Chulschi and Beaufort Seas off Alaska and in the Ross Sea off the Antarctic."
RICHARD M. WINAR B.S. 1953 M.S. 1955	West Valley, New York. "My wife Lois and I recently attended the second Asean Council on Petroleum and Energy in Manila (October 7-11, 1981), where I delivered a paper on "Regional Site Selection Criteria for Nuclear Waste Disposal Repositories". It was very surprising to learn that the moderator of my session was an Illinois alumni; Dr. Charan Achalabhuti, of the Petroleum Authority of Thailand."

Later, we had a most pleasing visit with an old classmate, Elpidio (Al) de la Cruz Vera and his wife. I conveyed best wishes to him from Dr. George White and Len and Hildy Schultz, as per their letters, and we had a great time catching up on some twenty-five years which has slipped by since our last visit on campus at the Natural History Building or drinking Bud's coffee."

DENNIS S. WOOD  
Faculty  
1969-1981

Bangor, North Wales, Great Britian. "Surprisingly-to-me, I've taken well to the industrial life and don't even find it too great a chore being in the office at 9:00 a.m. This is probably because there's no Murphy's and the pubs close at 10:30. . . I often feel homesick for Urbana.

BILLY W. WREN  
B.A. 1971

Belleville, Illinois. "Entered Officer's Training School 1972. Cartographic Officer - Langley AFB, VA, 1972. Undergraduate Pilot Training - Selma, AL, 1975. Advanced Pilot Training - C-141, Altus, OK, 1976. Pilot - C-141, Starlifter, 1976. Pilot - C-9, Nightingale, 180-present.

*Note from Dr. Donald A. Boyer (father of deceased alumnus Paul Boyer) Sci.-Educ. Consultant, Sidney Farber Inst. (Harvard): "In early December the mail brought the Geology Department's 'Twenty-sixth Annual Newsletter - 1980-81' and its In Memorium statement -- plus the Notice Appeal about my investigative work. There have followed many useful responses. Just this week came a letter from Prof. James Roche (on leave at L.S.U.). He was a fond grad study buddy of Paul's. I can generalize briefly, here, that the help given by you has, to date led to contacts directly or indirectly with over a dozen resources, especially alumni; and their evidence and suggestions offer prospects for a sort of medico-scientific breakthrough in clearing up the mystery of Paul's death from esothelioma. Much work still lies ahead, but the Harvard Med. team and I feel that we are moving ahead mainly through productive data tendered by Illini graduate fellows of Paul's that include: Dr. Norman Pace (Medical researcher in Denver), Richard Ely (at Berkeley), Sue (Maylburg) Kay (Cornell U.) and Mike Moore (Bloomington). These good people have also directed me to wider sources -- new investigators of the health threats from radiation and material-particle pollution (including certain types of asbestos.) . . .*

WHY NOT SEND A NOTE FOR NEXT YEAR'S NEWSLETTER RIGHT NOW?

SEND TO:

Patricia Lane, Editor  
Department of Geology  
253 Natrual History Bldg.  
1301 W. Green  
Urbana, Illinois 61801

## ALUMNI NEWS RELEASES

JAMES R. BAROFFIO  
B.A. (Wooster)  
M.S. (Ohio)  
Ph.D. 1964

The 1981 Orton Award, recognizing distinguished achievement by a graduate of the Ohio State was presented on November 2, at an alumni gathering in Cincinnati. The gathering, attended by over 100 graduates, faculty and guests occurred during the national meeting of the Geological Society of America. Jim joined the Standard Oil Company of California as a Development Geologist with Standard Oil Company of Texas in that same year. In 1964, Jim became Vice President of the Exploration Research Department of Chevron Oil Field Research Company and is now President of that Organization.

He is a member of the American Association of Petroleum Geologists, the Society of Exploration Geophysicists, and Sigma Xi Honorary Society.

JANE GRAY  
A.B. (Radcliffe)  
Asst. 1951-52  
Ph.D. (California)

Eugene, Oregon. A paleontologist at the University of Oregon, has been trying to trace the evolutionary events that occurred during the intervening 200 million years between 600 million years ago and 400 years ago. Evidence consists of fossilized plant spores taken from oil-drilling cores at a site in Libya.

WALLACE W. HAGAN  
B.S. 1935  
M.S. 1936  
Ph.D. 1942

Lexington, Kentucky. In 1942, he was in charge of the Ground Water section of the Indiana Geological Survey locating additional needed groundwater supplies for local communities in the state early in the war years. Wallace participated in geologic programs that provided public service to the state and federal governments. He served on the Kentucky Chamber of Commerce Topographic Committee which got the mapping program started which covered all of Kentucky. Upon retirement in 1978, he has been active as a consulting geologist from his home. Received AAPG's Public Service Award at the Annual Meeting, June 1982, Calgary, Canada.

CHUN SUN HO  
B.S. (Nat'l  
Central Univ.)  
U.I. 1955-56

He is now associated with the Mining Research and Service Organization of the Republic of China. The MRSO is sort of a combination Bureau of Mines and semipublic consulting firm. Ho recently completed compilation of a new geologic map of the Taiwan, accompanied by a descriptive text in both Chinese and English and published by the Ministry of Economic Affairs, Republic of China. He is currently completing a descriptive text to accompany his tectonic map of China. This also will be published by MOEA. Both publications are available from the Mining Research and Service Organization ITRI, No. 1, Tun Hwa South Road, Taipei, Taiwan, REPUBLIC OF CHINA. (per R. Langenheim)

RICHARD F. MAST  
B.S. 1957  
M.S. 1959

Wheat Ridge, Colorado. Has been appointed Central Region geologists for the U.S. Geological Survey to coordinate the Survey's Geologic Division research and investigations in a fifteen-state area with headquarters in Denver, Colorado.

BRUCE NELSON  
B.S. (Harvard)  
M.S. (Penn.)  
Ph.D. 1955

Charlottesville, Virginia. Been awarded a Fullbright to Malaysia-Kuala Lumpur to be more exact. Leave end of May 1982 and returning in April. (% Geology Dept., Univ. of Malaya, Kuala Lumpur 22-11, Malaysia).

HAROLD W. SCOTT  
A.B. 1929  
A.M. 1931  
Ph.D. (Chicago)

Urbana, Illinois. A professor of geology emeritus from two universities, he was chairman of a group of American geologists who journeyed through the People's Republic of China as guests of the Petroleum Ministry late last year.

A native of Milford, and a longtime resident of Urbana, he attended the University of Illinois and earned his doctorate at the University of Chicago. He joined the UI Urbana campus faculty in 1937, retiring in 1968. He then was chairman of Michigan State University's geology department from 1969-74.

The group Mr. and Mrs. Scott were with had four weeks of travel within China. He was interested particularly in that nation's energy resources and development, along with China's new industrial revival and social changes and their impact on contemporary society and international affairs in the years ahead.

JACK A. SIMON  
A.B. 1941  
M.S. 1946

Urbana, Illinois. He was former Chief of the Illinois State Geological Survey and nationally known coal geologist, and was honored by nearly 300 guests at a reception at the Round Barn Convention Center, March 28. The reception was arranged to recognize his retirement from the Survey on March 1, 1982. At his reception he received a commendation that Governor James R. Thompson had written to Simon, noting his more than forty years of service to the Geological Survey.

State Representative Helen Satterthwaite presented Simon with a resolution passed by the 82nd General Assembly praising him for his contributions to the Survey, to coal geology, and to the citizens of the state of Joan Anderson, a member of the Illinois Pollution Control Board and former Director of the Department of Registration and Education, read a resolution of the Pollution Control Board citing Simon's efforts at the Geological Survey to protect the environment of the state. Jack Medlin and William Mengel of the United States Geological Survey presented him with plaques in appreciation of his cooperation in geologic and topographic mapping projects between the two Surveys.

He received the Gilbert H. Cady Award of the Geological Society of America in 1975 for his contributions to the science of coal geology, was awarded an honorary degree of Doctor of Science from Northwestern University in 1981. In February, he received the Percy W. Nicholls Award of the Society of Mining Engineers of the American Institute of Mining and Metallurgical Engineers for 1981 for his leadership in studies of coal.



Southern Illinois University, Carbondale named him as the first recipient of the Coal Day Award for significant contributions to the Illinois coal industry. And Southern Illinois University, Edwardsville, presented him with a Distinguished Service Award for his contributions to coal research.

He is continuing to serve the Geological Survey on a part-time basis as Principal Scientist and Chief Emeritus.

F. MICHAEL WAHL  
A.B. (DePauw )  
M.S. 1957  
Ph.D. 1958

He taught geology from 1958 through 1969 at the U. of I, after which he was appointed Professor and Chairman of the Department of Geology, University of Florida, where he most recently served as Dean for Graduate Studies and Research.

He has been a geological consultant for the past 25 years and has also worked for the Illinois State Geological Survey and for the Shell Development Company. He served with the U.S. Army Corps of Engineers, 1953-55.

Dr. Wahl will assume his new duties as GSA Executive Director on July 1, 1982, at which time he and his wife, Dottie, and daughter, Kathryn, will move to Boulder.

RICHARD A. YUND  
B.S. 1956  
Ph.D. 1960

Professor Richard A. Yund of Brown University has been selected as the first recipient of the VGP Award of the American Geophysical Union. This award was established to honor individuals who in the past 5 years have made a significant contribution to the fields of volcanology, petrology, or geochemistry. Professor Yund was cited for his pioneering work on the kinetics of solid state processes in minerals.

Professor Yund is particularly well-known for his studies on the kinetics and mechanisms of exsolution and elemental diffusion in feldspars and the factors which control or affect these processes. More recently, Professor Yund's interests have included the interaction of ductile deformation and other solid state processes such as diffusion rates in minerals and growth rates in fine-grained aggregates.

Through his ability to recognize significant new areas of research and his intuition and perseverance in designing and carrying out the complex experiments required for advances in these areas, he has had a major impact on the direction of research in solid-state mineralogy and geochemistry. The Illinois Department of Geology adds its congratulations to Professor Yund for this richly-deserved honor.

1981-82  
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If your name is missing, or the name of an  
Alumnus you know, please drop a note to us  
so that our next directory will be more complete.





## IN MEMORIAM

DR. MARIA-ISABEL CRUZ-CUPLIDO

*It is with great sadness that we report the death of a former faculty member, Maribel Cruz (as she was known to us), on 30 October 1981, in Orleans, France. Dr. Cruz was a Visiting Associate Professor and Associate Professor in the department from 1972 to 1974. She worked here with Dr. Jose J. Fripiat in clay mineral research and taught Geology 461 and 462; Mineralogy of Clays, during that period.*

*She left the department to join Dr. Fripiat at the brand-new wonderfully equipped and situated Centre de Recherches sur les solides a organisation cristalline imparfaite, CNRS, in Orleans, France. She did research there, holding the title of Maitre de Recherche, until her death.*

*Dr. Cruz was born in Malaga, Spain, received a Ph.D. in chemistry from the University of Madrid, 1965, and was a research scientist with the Consejo Superior de Investigaciones Cientificas, Madrid, from 1961 to 1967. During 1965 to 1968 she was a Visiting Assistant Professor at Purdue. She then joined the University of Louvain, Belgium, and was a research scientist there until coming to our department.*

*Dr. Cruz was the author and co-author of many publications on a wide range of subjects, mostly having to do with the surface behavior of solids, especially layer-structure hydroxides and silicates. In recent years her chief interest was the adsorption of organic complexes on silicate surfaces.*

*Maribel had an enormous number of friends all over the world. All of us mourn the tragic cutting off of life, at so early an age, of one having so much charm and joie de vivre. We grieve also for so great a loss to her husband Jose J. Fripiat (also a former faculty member here; present address CNRS/CRSOCI, rue de la Ferrollerie, 45045 Orleans, CEDEX, France), and her mother and two sisters.*

*In the ever so appropriate words of Joe Fripiat:*

*"Souvenez-vous de son sourire."*

*(Remember her smile.)*



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# TWENTY - EIGHTH ANNUAL NEWSLETTER



## DEPARTMENT OF GEOLOGY

University of Illinois  
at  
Urbana-Champaign  
1982-83





# DEPARTMENT OF GEOLOGY

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July 1983

Dear Friends and Alumni:

The department has continued to change quite rapidly. Dave Anderson will begin as Department Head in the fall semester, with me going back to full time teaching and research after a five year stint. He will bring some fresh new ideas and, perhaps, changes in direction in the development of the department. Don Henderson has also resigned from the onerous task of Assistant Head-Educational Coordinator. He has contributed much to smooth the running of the department over the past five years.

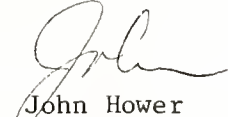
Vic Palciauskas has left the department for Chevron Research in La Habra, California. Steve Marshak, a structural geologist who is just finishing at Columbia U. - Lamont-Doherty, will be joining the faculty this fall. We are also engaged in searching for faculty to fill positions in sedimentary geochemistry, hydrogeology, and geophysics.

Chuck Uhl, who was assistant to the head, has also left the department. His position has been discontinued--budgets are mighty tight these days--and his duties have been taken over by Pat Lane, who seems to be shouldering many of the administrative duties in the department these days.

As you will see in the body of this Newsletter, The Grim Chair in Geology has been filled with an outstanding geologist. Dick Hay, who has spent most of his career at Berkeley, began as Grim Professor of Geology on July 1 of this year. As most of you know, Dick has contributed much to our understanding of the petrology of zeolitic volcanogenic sediments and worked out the geologic history of Olduvai Gorge. We are certainly pleased to have him; the department is deeply grateful to Ralph Grim for making it possible.

Hope to see all of you at the cocktail party at the GSA meeting in Indianapolis this November.

Sincerely,

  
John Hower  
Professor and Head

JH:kr



# Geology Faculty/Staff

## ADJUNCT FACULTY

Leon F. Follmer.....(Ph.D., Illinois)  
Paleopedology, soil geomorphology,  
quaternary geology [Illinois State  
Geological Survey, Urbana]

James E. King.....(Ph.D., Arizona)  
Quaternary palynology and paleoecology  
[Illinois State Museum, Springfield]

Thomas G. Naymik.....(Ph.D., Ohio State)  
Hydrogeology [Illinois State Geological  
Survey] 1/2 time appointment to begin  
Aug. '83.

Tommy L. Phillips....(Ph.D., Washington)  
Botany, Palaeontology [Joint Appointment  
with Botany]

## EMERITUS FACULTY

Carleton A. Chapman	Donald L. Graf
Ralph E. Grim	Arthur F. Hagner
Harold W. Scott	George W. White

## ACADEMIC PROFESSIONALS

Cameron Begg	Linda Westgate
--------------	----------------

## NONACADEMIC PERSONNEL

John F. Bauerle.....Instrument Maker and  
Shop Supervisor

Donald D. Dodson.....Instrument Maker

Murle Edwards.....Chief Clerk

Barbara Harned.....Clerk-Typist III

Patricia Lane.....Department Secretary,  
Nonac Supervisor and Editor

Margorie Newman.....Clerk-Typist II

David R. Phillips.....Cartographer

Jack O. Pullen.....Physical Science  
Technician

Karolyn Roberts.....Clerk-Typist III,  
Key Word Process Operator

Carol Sanderson...Secretary-Transcribing

## GEOLOGY FACULTY

David E. Anderson.....Metamorphic and  
theoretical petrology

Thomas F. Anderson.....Stable isotope  
geochemistry; oceanography

Daniel B. Blake.....Invertebrate

Albert V. Carozzi.....Sedimentology;  
sedimentary petrography;  
petroleum geology

Wang-Ping Chen....Geophysics; seismology;  
tectonics

Donald M. Henderson.....Mineralogy;  
crystallography

John Hower....Diagenesis; clay mineralogy

Albert T. Hsui.....Geophysics;  
mathematical modelling;  
geodynamics and planetary  
interiors

W. Hilton Johnson.....Quaternary  
stratigraphy; glacial geology;  
geomorphology

R. James Kirkpatrick.....Igneous and  
experimental petrology

George deVries Klein.....Sedimentology;  
marine geology; sandstone  
petrology and diagenesis;  
petroleum geology of clastic  
reservoirs

Ralph L. Langenheim.....Stratigraphy;  
paleontology; field geology;  
geology of energy, coal

C. John Mann.....Mathematical geology;  
stratigraphy

Alberto S. Nieto.....Engineering geology;  
applied rock mechanics

Philip A. Sandberg.....Carbonate  
sedimentology;  
micropaleontology

## RESEARCH ASSOCIATES

Cheng-Yun Yang....(Visiting - P.R. China)  
Carbonate rock petrography and  
paleoecology

Todd Dunn.....Experimental petrology

## VISITING INSTRUCTOR

Kerry L. Keen

# Department Activities

## GEOLOGY DEPARTMENT COMMITTEES 1982-1983

### Admissions

R. J. Kirkpatrick, Chmn.  
T. F. Anderson  
G. deV. Klein  
D. M. Henderson, ex. of.

### Graduate

A. V. Carozzi, Chmn.  
D. Anderson  
A. T. Hsui  
D. M. Henderson, ex. of.

### Undergraduate

W. H. Johnson, Chmn.  
A. S. Nieto  
W-P. Chen  
C. M. Henderson, ex. of.

### Advisory

R. J. Kirkpatrick  
D. M. Henderson, ex. of.  
R. L. Langenheim  
A. T. Hsui

### Library

A. V. Carozzi, Chmn.  
A. T. Hsui  
R. L. Langenheim

### Courses and Curriculum

P. A. Sandberg, Chmn.  
R. J. Kirkpatrick  
W. H. Johnson  
C. J. Mann  
D. M. Henderson, ex. of.

### Technical Services

D. E. Anderson, Chmn.  
P. A. Sandberg  
T. F. Anderson

### Placement

C. J. Mann

### Colloquium

A. S. Nieto

### Honors Chairman

W. H. Johnson

## NEW FACULTY MEMBER CHOSEN

After a two-year search the department has offered the structural geology position vacated by Dennis Wood in 1981 to Stephen Marshak. Steve comes to us from Columbia University. He is a native of New York State and received his A.B. in Geology from Cornell Univ., his M.S. from Univ. of Arizona in 1979 and a M. Phil. in 1981 from Columbia Univ. He will be completing his Ph.D. from Columbia this fall. His research interests include structural geometry of thin-skinned fold-thrust belts; mechanism of cleavage development in limestone; structure of Jurassic hypabyssal magma chamber in Antarctica; regional geology of Mesozoic rocks in southwestern Arizona; in situ stress patterns near the San Andreas Fault and in northeastern USA and geological consequences of triple junctions. Steve has many ideas and plans for continuing and refining work on these projects when he comes to Illinois. Before moving to the new house with his wife Kathy, Steve will be making a field trip to Scotland with our new department Head, Dave Anderson.

## SEARCHES CONTINUE

New search committees have been or will be formed to find superior quality faculty to fill positions in the areas of sedimentary geochemistry, hydrogeology and rock mechanics in the geology department. The faculty has agreed to continue these searches until a person can be found to meet their high standards even though the positions are presently vacant. Advertising will appear in EOS and Geotimes giving details of each position and the deadline for applications to be received for equal consideration. Interviews will also be conducted at GSA in Indianapolis.



# THE RALPH E. GRIM

## PROFESSOR OF GEOLOGY

### RICHARD L. HAY APPOINTED FIRST RALPH E. GRIM PROFESSOR OF GEOLOGY

Richard L. Hay was born in Goshen, Indiana and attended Ursinus College for two years as a pre-med student as part of the U.S. Navy-V12 program before going to Northwestern Univ. to complete his B.S. degree in Geology in 1947 and his M.S. in Geology in 1949. He received his Ph.D. in Geology from Princeton in 1952. From 1952 to 1954 he served as an enlisted man in the U.S. Army, C.E., in Washington, D.C. and Japan doing terrain analysis and 1954-55 found him working as a geologist for the U.S.G.S. doing geologic mapping in the western Pacific. He became an Assistant Professor at L.S.U., Baton Rouge for two years and then joined the faculty of the Univ. of California, Berkeley where he remained until accepting the Ralph E. Grim Professorship on July 1, 1983.

Professor Hay has received the Kirk Bryan Award from the Geological Society of America and the Arnold Guyot Award from the National Geographic Society. His research has been concentrated on the nature and significance of the mineralogical and chemical changes that take place in sediments that are derived from explosive volcanism--such as the

volcanic ash deposits produced by the eruption of Mt. St. Helens in 1980. Since 1962 he has applied this approach, and his expertise in field work, to determine the geology of early man in Olduvai Gorge, Tanzania, assisting the anthropological research of Drs. Louis and Mary Leakey. Professor Hay's combined field and mineralogical studies have allowed a reconstruction of man's ice age, Pleistocene, environment over the past 1.8 million years. Subsequently he applied a similar approach to the older Pliocene deposits of nearby Lac-toli, which have yielded footprints of man's ancestors 3.5 million years old.

Professor Hay's present major research concerns deposits of unusual limestones and magnesium silicate clay minerals present in a Pliocene lake basin in The Amargosa Desert of Nevada and California. The clay minerals that formed in this lake include large deposits of sepiolite, the mineral that makes up the low density rock commonly called meersch-chaum. Professor Hay is attempting to work out the chemical conditions that produced the unusual assemblage of minerals in the former lake basin which is now a desert.

### About Professor Grim

Professor Grim came to the University of Illinois Geology Department after being with the ISGS from 1931 to 1950. He studied clay mineralogy and wanted to write a book on the subject which he felt he would be able to do in the climate of the University. He taught two clay classes and held seminars in the department and in 1959 became active in the development of human and mineral resources in Iran and the Ivory Coast in West Africa. Many hours were spent traveling, consulting and training Ivory Coast nationals to continue the development of their resources. During this time, Ralph was instrumental in finding an enormous iron ore deposit which others maintained was nonexistent, but which is now a working iron ore mine. In 1975 the Ivory Coast gave Ralph a special award (Chevalier) for his help in developing the Ivory Coast from a French Colony to a most successful African country. Ralph has traveled almost everywhere in the world, including Australia, Brazil, Central America, Viet Nam (he was trapped there for two weeks during the Tet Offensive), Russia and Europe, and has a story to tell about every one of them. He has written down over 600 typewritten pages of memories from his travels just so he wouldn't forget them. There have been many awards over the years--among them the Roebling Medal from the Mineralogical Society of America where he served as President and most recently was named an SEPM, Hono-

rary Member at their meeting in Calgary, Canada. Ralph enjoys good health and continues to do consulting, research and writing. He and his wife were in France this spring and there is also the possibility of a trip to Yugoslavia for an international bauxite conference in the fall.

### Why An Endowed Chair?

About five years ago, Ralph set into motion the funding, planning and preparations necessary to set up the Ralph E. Grim Professor of Geology--An Endowed Chair. When Ralph was asked why, his response was, "To say thank you to the University of Illinois for giving me the opportunity and freedom I needed to write and work on what I wanted to do--Research in Clay Mineralogy." He sees the endowed professorship in Geology as a continuation of his field of Clay Mineralogy. Although Ralph did not know the recipient of the Chair, Richard Hay, very well before he was chosen by the search committee, he is well pleased with their choice and has had the opportunity to meet with Richard several times since his acceptance of the chair. Ralph feels that "Richard Hay will be a very active and productive member of the faculty who will attract other active and productive faculty, students and staff to the department." Ralph says all this will happen because "Richard like me, will be working on what he wants to do. It makes all the difference."

*Based on Interview with Ralph Grim in his office on June 28, 1983.*

## AAPG ALUMNI PARTY

Ralph Langenheim served as Departmental representative at the Alumni Party held June 28 in the Calgary Convention Center during the 1982 Annual Meeting of the AAPG. About 25 alumni and their guests attended and enjoyed the program of swapping reminiscences and catching up on the activities of their friends, in short doing the alumni 'thing'. A fairly complete list of those present follows: Linda and Jack Tollfson from Amoco in Houston; Trish Santogrossi of Shell, Houston; Paul Plusquelluc of Natomas; Chris Heath, Regional New Venture Manager for Amoco International in

Houston; Dick Mast and guests Larry Wilcon and wife, all of U.S.T.S., Denver; Nahum Schneiderman of Gulf Research and Development; Bill Hay of the Univ. of Miami and the JOIDES Consortium; Mike Bourque of Shell, New Orleans; William J. Byrd of Sun Oil, Walter Hagen and wife, retired; John Hopkins, a friend of Paul Schluger from the Univ. of Calgary; Augustus Wilson, a consultant and a former visitor to the Arrow Canyon Project in Nevada; Jack Threet and wife of Shell in Houston; and William J. and Mary Gard of Amoco.

# FACULTY PUBLICATIONS

## ANDERSON, THOMAS F.

### Books and Articles

Westgate, L.M. and Anderson, T.F., 1982. Extraction of various forms of sulfur from coal and shale for stable sulfur isotope analysis: *Anal. Chem.*, 54, 2136-2139.

### Abstracts and Reviews

Holser, W.T., 1982. Organic carbon and sulfur in black shales and secular variations in  $\delta^{13}\text{C}$  and  $\delta^{34}\text{S}$  (Abs): *Geol. Soc. Am.*, 1982 Annual Meetings, 433.

Hackley, K.C. and Anderson, T.F., 1982. Sulfur isotope study of coals from the Rocky Mountain region (Abs): *Geol. Soc. Am.*, 1982 Annual Meetings, 504.

Sandberg, P.A., and Goldstein, S.J., 1982. Isotopic, chemical and textural relations during experimental alteration of biogenic high-magnesium calcite (HMC) (Abs): *Geol. Soc. Am.*, 1982 Annual Meetings, 636.

## BLAKE, DANIEL B.

### Books and Articles

Blake, Daniel B., 1982. Somasteroidea, Asteroidea and the affinities of *Luidia* (Plastasterias) *Latiradiata*. *Palaeontology*. 25(1) 167-191.

Blake, Daniel B., 1982. Recognition of higher taxa and phylogeny of the Asteroidea, 105-107. In: J.M. Lawrence, ed. *Echinoderms: Proceedings of the International Conference*, Tampa Bay. A.A. Balkema, Rotterdam.

### Abstracts and Reviews

Blake, Daniel B., 1982. Paleontology of Asteroidea. 2nd Int. Symp. Marine Biogeog. Evol. Pacific, Sydney, Australia, July, 1982.

Blake, Daniel B., 1982. Biological controls on the distribution of shallow water sea stars. 2nd Int. Symp. Marine Biogeog. Evol. Pacific, Sydney, Aust., July, 1982.

## CAROZZI, ALBERT V.

### Books and Articles

Carozzi, A.V., de Carvalho, M.D., Paumer, L.M., Coelho de Lima, C., Babinski, N.A. and Fanha B.A., 1982. *Sistemas deposicionais e evolucao*

*diagenetica dos carbonatos e evaporitos da plataforma de São Mateus (ES): Anais XXXII Congr. Brasileiro de Geologia, Salvador, Bahia, 5, 2328-2335.*

### Abstracts and Reviews

Carozzi, A.V., 1982. What they thought in Continental Europe: in A.A.A.S. Symposium What Happened to the Idea of Moving Continents after Wegener Proposed it? 148th National Meeting A.A.A.S. Washington D.C., Abstract of Papers, 109-110.

## CHEN, WANG-PING

### Books and Articles

Molnar, P. and W.-P. Chen, 1982. Seismicity and mountain building, in *Mountain Building Processes*, K. Hsu editor, Academic Press, 41-57.

Molnar, P. and W.-P. Chen, 1983. Depths and fault-plane solutions of earthquakes under the Tibetan plateau, *J. Geophys. Res.* 88, 1180-1196.

Chen, W.-P. Molnar, 1983. Focal Depths of intracontinental and intraplate earthquakes and their implications for the thermal and mechanical properties of the lithosphere, *J. Geophys. Res.*, 88, 4183-4214.

Molnar, P., W.-P. Chen and E. Padovani, 1983. Temperatures in overthrust terrains and the origin of Tertiary granites in the Great Himalaya, *J. Geophysics Res.*, in press.

Ye, H., W.-P. Chen, and P. Molnar, 1983. Source processes and tectonic implications of the 1976 Tangshan earthquake sequence in northern China, in preparation.

Molnar, P., and W.-P. Chen, 1983. S wave travel time residuals and lateral inhomogeneity in the mantle beneath Tibet and the Himalaya, submitted to *J. Geophys. Res.*

## HENDERSON, DONALD M.

### Books and Articles

Kirkpatrick, R.J., D.M. Henderson, R.A. Kinsey, K.A. Smith, and E. Oldfield, 1982. High-resolution NMR of silicates and silicate glasses, Int. Mineralogical Assoc., Bi-annual Meeting, Varna, Bulgaria.



## **HOWER, JOHN**

### **Abstracts and Reviews**

Hower, J., S.P. Altaner, J.L. Aronson, and G. Whitney, 1982. Kinetic and compositional controls of the smectite to illite reaction. Geol. Soc. Amer. Annual Meeting, New Orleans, Nov. 1982.

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## **HSUI, ALBERT T.**

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#### **KLEIN, GEORGE deV.**

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#### **LANGENHEIM, RALPH L., JR.**

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#### **NIETO, ALBERTO S.**

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## International Sedimentological Congress

The International Sedimentological Congress was held in Hamilton, Ontario, Canada on August 22-27, 1982 and the department was strongly represented there by faculty, graduate students, and many alumni. P. A. Sandberg presented a keynote address on "Ancient aragonite cements and the overworked modern analogue" and a second paper with Zakaria Lasemi (student) entitled "Temporal variations in micrite ultrastructure: are they mineralogically dependent?" G. deV. Klein presented several papers including "Probable sequential arrangement of depositional systems on cratons" and "Dispersal sedimentology of a tidal current sand ridge, Yellow Sea, Korea". Klein also chaired a session on Tidal Sedimentation. Y. I. Lee (graduate stu-

dent, Klein) presented part of his thesis work on "Burial and thermal diagenesis of sandstones, Deep Sea Drilling Project Sites 445 and 446, Daito Ridge and Basin, northwest Pacific". K. M. Marsaglia and G. deV. Klein presented a poster session on "Paleogeography of storm depositional systems."

Many alumni in the department presented papers also, including R. A. Cahill, R. A. Davis, Jr., D. L. Eggert, G. S. Fraser, R. N. Ginsburg (elected Vice President of the International Association of Sedimentologists during the meeting), J. C. Horne, T. J. Kemmis, D. R. Lowe, W. J. Nelson, and D. Nummedal, amongst others. Other alumni attending the meeting included W. H. Busch, J. W. Castle, Danita Brandt, and D. E. Lawson.

# Colloquim Programs

Professor Alberto S. Nieto, this year's Colloquium Director, used an eclectic approach in selecting the speakers for the Colloquium series. The subjects ranged from astrophysics to effective geo-writing. Judging from the attendance and audience response, the idea of wide-ranging (geology-related, of course) topics merits further attention. In addition to the regular series, we had doctoral dissertation colloquia, brown bag seminars, as well as special colloquia by applicants for faculty positions. We are grateful for the help from the members of the Department that contributed to the success of this year's colloquia, specially for the help from Barbara Harned, the Colloquium Secretary.

## September 1982

- 10 - **PROF. JOSEPH W. STUCKY** (Dept. of Agronomy, U. of I. at Urbana-Champaign) "The effect of iron oxidation state on clay swelling."
- 17 - **PROF. ALBERT T. HSUI** (Faculty Member) "Crystal fractionation, double diffusive fracturing, and formation of columnar joints."
- 24 - **MS. MARY H. BARROWS** (IL State Geol. Survey), "Maturation studies of sedimentary organic matter in the Illinois Basin."

## October 1982

- 1 - **BRUCE D. VELDE** (Laboratoire de Geologie Ecole Normale Supérieure Paris, France) "Experimental determination of the equilibrium distribution of Ni and Mg in tale in infiltration diffusion systems."
- 4 - **WANN LANGSTON** (Dept. of Geological Sciences, Univ. of Texas, Austin, TX) "Flying reptiles: "The Great Pterosaurus Flap."
- 8 - **DR. IAN STEELE** (Dept. of Geophys. Sciences, Univ. of Chicago, IL) "Applications of the ion microprobe in mineralogy, petrology and geochemistry."
- 15 - **DR. ALBERT VALOCCHI** (Hydrologist, U. of I.) "Water quality changes during groundwater recharge with municipal wastewater."
- 22 - **PROF. SEIYA UYEDA** (Earthquake Research Institute, Univ. of Tokyo) "Comparative subductology."
- 29 - **DR. LARRY HASKIN** (Washington Univ., St. Louis) "Does fractional crystallization really control lava compositions?" "Electrochemistry of silicate melts a new tool."

## November 1982

- 5 - **DR. JOHN CORLISS** (Geological Oceanographer, Oregon State Univ.) "Sea floor hot springs and their relevance to biogenesis."
- 12 - **DR. WILLIAM KELLY** (Geology Mineralogist, Univ. MI) "The tungstene deposits of Panasqueira, Portugal."
- 19 - **DR. ANDREW MIALI** (Dept. of Geology, Univ. of Toronto Ont, Canada) "The role of tectonics on alluvial basin architecture."

## December 1982

- 3 - **PROF. ROB VAN DER VOO, CHAIRMAN** (Dept. of Geological Science, MI) "Paleomagnetism and Pre-Mesozoic plate tectonics."
- 10 - **DR. DAVID M. MICKELSON** (Dept. of Geology and Geophysics, Univ of WI) "Erosion and deposition beneath ice sheets and the formation of drumlins." "Geomorphic processes along eroding coastal bluffs."
- 13 - **DR. WILLIAM MOLL** (Cabot Corp., Tuscola, IL) "Fume-silica a synthetic mineral of Illinois."

## January 1983

- 20 - **DR. KARL KARLSTROM** (Dept. of Geology, Univ. New Brunswick, Canada) "The Cheyenne Belt: Analysis of a proterozoic suture in Southern Wyoming and implications for continental accretion."
- 21 - **DAVID B. BIELER** (Dept. of Geology, Memphis State Univ., TN) "Geology of The Precambrian Mona Complex, Southeast Anglesey, North Wales: A tale of two Melanges."

- 24 - **STEPHEN MARSHAK** (Lamont-Doherty Geological Observatory, Columbia Univ. NY) "Aspects of pressure solution deformation in carbonate fold belts."
- 27 - **REID COOPER** (Dept. of Material Science, Cornell Univ. NY) "Structure and rheology of partially molten mantle material".
- 28 - **DR. TOM NAYMIK** (Illinois State Water Survey) "A groundwater solute transport experiment."

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#### February 1983

- 4 - **DR. CHAS ROBERT ULLRICH** (Dept. of Civil Engineering, Univ. of Louisville, KY) "Underground space utilization in Louisville, KY."
- 11 - **DR. ED OLSON** (Dept. of Astronomy, Univ. of IL) "Computer simulation of the evolution of the Earth's atmosphere."
- 18 - **DR. JAMES TRURAN** (Prof. of Astronomy, Univ. of IL) "Origin of the Elements."
- 25 - **DR. ROBERT GRIFFIN** (Illinois State Geological Survey, IL) "Investigation of failure mechanisms and migration of industrial chemicals at Wilsonville, Illinois."

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#### March 1983

- 4 - **DR. WAYNE A. PRYOR** (Prof. of Geology, Univ. of Cincinnati, OH) "Shales - Their sedimentology and geology."
- 11 - **DR. COLIN BOOTH** (Dept. of Geoscience, Pennsylvania State Univ. PA) "Hydrogeology of subsurface coal mines."
- 18 - **DR. DONNA JURDY** (Dept. of Geological Sciences, Northwestern Univ.,

IL) "Seismic reflection profiling; a look into the deep continental crust."

- 25 - **DR. NOEL P. JAMES** (Dept. of Geosciences, Memorial Univ. Newfoundland), "Geologic history of reefs."

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#### April 1983

- 8 - **DR. JEAN LAJOIE** (Dept. of Geology, Universite de Montreal, Quebec) "Deep-Sea Fan Model: Fact or Fiction?"
- 11 - **DR. JAY BASS** (California Institute of Technology) "The effect of crystal structure and composition on mineral elasticity by brillouin spectroscopy."
- 14 - **ANDREAS KRONENBERG** (U.S. Geological Survey, CA) "Deformation of quartzite: effects of impurity, water, and grain size."
- 15 - **DR. STEVE WELLS** (University of New Mexico) "Geomorphic process and rates in Semiarid Lands: applications to energy-mineral development."
- 18 - **STEPHEN J. BAUER** (Center for Tectonophysics, Texas A & M Univ.) "Semi-brittle behavior of granite in upper crustal conditions."
- 22 - **DR. HUGH HAY-ROE** (Dept. of Geology, Global Energy Operatives, TX) "Seminar and colloquium on technical writing."
- 29 - **DAVE OLGAARD** (Dept. of Earth and Planetary Sciences, Institute of Technology, MA), "New laboratory observations of recrystallization in synthetic marbles: implications for paleostress measurements."

## Seismograph

The Department has ordered a short-period seismograph system which will be installed in the hallway of the Natural History Building. We plan to operate this unit continuously as a teaching tool as well as a show piece for our geophysics program to the general public. A group of students will be organized by Wang-Ping Chen to perform

the routine operations. The timing of installation is excellent because a recent earthquake (Magnitude 4.4 on the Richter Scale) which occurred about 50 miles east of St. Louis generated considerable interest within the State about the occasional seismic activity in the southern part of Illinois.



# What are you going to do when you retire John?

After retirement, I believe my problem will be "What do I do first?" rather than "What will I do now?"

I have many neglected hobbies, as well as neglected jobs to be done at home, and new endeavors I wish to pursue. In the steam modeling hobby I have two locomotives to complete, a 350' loop of track to lay, and a depot building to complete.

I hope I will have more time for photography, music, genealogy, traveling, and woodworking.

For economic reasons I may be forced to do some mechanical consulting and machine work (after shop is complete and some of the "fun" things are done).

Uppermost in my mind is a proposed trip to Germany next spring to visit new-found relatives in **der Nähe von Stuttgart** and perhaps do volunteer construction or other work at our European Nazarene Bible College at Büsingen (on the bank of the Rhein River) for a minimum of three months--I may not wish to return.

There are two German proverbs I'm considering:

"Wer rastet der rostet" - "He who rests, - rusts"

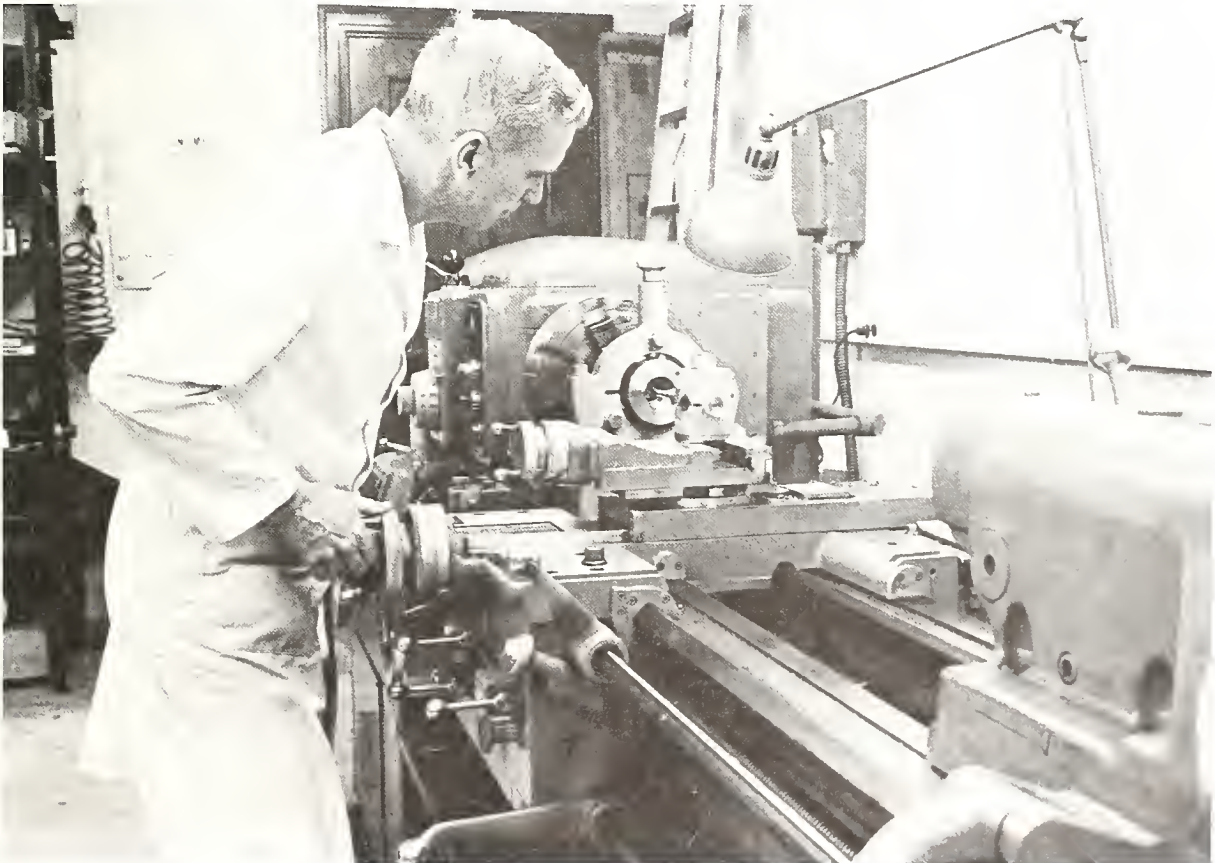
and

"Erst die Arbeit, dann's Vergnügen" -

"First comes work, then the pleasure."

Maybe they're both applicable.

**EDITOR'S NOTE:** I know the faculty, staff, students and alumni of the Geology Department join me in saying thanks John for all you've done for us and the department.



John Bauerle, Instrumentmaker, Geology Department 1967-1983  
(Working On Shop Equipment He Helped Set Up)

# CURRENT GRADUATE STUDENTS

**ADAMS, STEPHEN V.**

BS - University of Illinois

**ALTANER, STEPHEN P.**

BA - Colgate University

- Exxon Fellowship

Altaner, Stephen, James L. Aronson, Gene Whitney and John Hower, 1982. Diffusional modelling of a zoned K-bentonite from the Disturbed Belt, Montana--talk presented at 1982 Clay Minerals Society Meeting (Altaner--Speaker).

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Hower, John, Stephen Altaner, James L. Aronson and Gene Whitney, 1982. Kinetics and Compositional Controls of the Smectite to Illite Reaction. Talk presented by Hower at 1982 GSA Meeting.

**BETHKE, CRAIG M.**

BA - Dartmouth College

**BAKUSH, SADEG H.**

BS - University of Tripoli; MS - Ohio State

**BARROWS, MARY H.**

BS - University of Illinois

**BERTANI, RENATO T.**

BS - University Federal do Rio Grande do Sul; MS - University of Illinois

**BONNELL, LINDA M.**

AB,MS - University of Illinois  
Co-Editor of Journal of the Geological Society of the Vermilion River

**BURGESS, STEVEN P.**

BS - University of Illinois

**CASAVANT, DEBORAH J.**

BA - College of William and Mary

**CHANG, WENG-FONG**

BS - National Taiwan University

**COLTEN, VIRGINIA A.**

BA - DePauw University; MS - Louisiana State University

Ginny Colten and Jeffrey S. Hanor (LSU). Behavior of dissolved lithium in the Mississippi River Estuary Submitted to Chemical Geology.

**COUTO DOS ANJOS, SYLVIA MARIA**

DIPGE - Fed. University Rio de Janeiro

**DAWSON, WILLIAM C.**

BS - University of Illinois; MS - University of Texas

**DEMIR, ILHAM**

BS - Hacettepe University

**DIABY, IBRAHIMA**

BS - Oregon State University; MS - University of Illinois

**ELSBREE, HOPE C.**

BA - Smith College

**FOX, JOHN M.**

BS - Southern Illinois University

**FRYER, KAREN H.**

BA - Wellesley College; MS - University of Illinois

**GEIL, SHARON A.**

BS - University of Illinois

**GRIMISON, NINA L.**

BA - Cornell University

**HACKLEY, KEITH C.**

BS - Pennsylvania State University

Sulfur isotope study of coals from the Rocky Mountain Region, 1982 Annual GSA Meeting, New Orleans, LA

Sulfur isotope variations in low-sulfur coals from the Rocky Mountain Region, to be presented in the Stable Isotope Studies Symposium at 1983 Annual GSA Meeting, Indianapolis, Ind.

**HORTON, DUANE G.**

BS, MS - Western Washington St. College  
Clay minerals associated with the Amethyst Vein System, Creede Mining District, Southwest Colorado, Clay Minerals Society Annual Meeting, Hilo, Hawaii, 1982 (Abstract).

**HUANG, JIE**

BS - Peking University

**HUFF, BRYAN G.**

BS - University of Illinois

**HUTASOIT, LAMBOK M.**

BS - Institute of Technology Bandung

**JACOBSON, RUSSELL J.**

BA - University of Northern Iowa

**KASZYCKI, CHRISTINE**

BA - Carleton University

Pleistocene diamicton facies associations in the Haliburton Region, South Central Ontario, G.S.A. Abstracts with Programs, 1983.

**KIM, HYE SUN**

BS - Seoul National University



**KIM, YOUN JOONG**  
BS,MS - Yonsei University, Korea

**KNOWLTON, POLLY L.**  
BS - University of Massachusetts; MS -  
University of Illinois

**KRUEGER, SCOTT R.**  
BA - Monmouth College

**LARSON, TIMOTHY H.**  
BS - Wheaton College; MS - Northern Ill-  
inois University

**LASEMI, ZAKARIA**  
BS - Pahlavi University

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BS - Tufts University; MS - University  
of Illinois  
Co-Editor of Journal of the Geological  
Society of the Vermilion River  
Origin of flow banding in rhyolite and  
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stracts with Programs, 1983.

**LEE, YONG IL**  
BS,MS - Seoul National University  
Burial and thermal diagenesis of sand-  
stones, Deep Sea Drilling Project  
Sites 445 and 446, Daito Ridge and  
Basin, Northwest Pacific presented  
at International Congress on Sedi-  
mentology, Hamilton, Ontario, Can-  
ada, Aug. 22-27, 1982.

**LEPZELTER, CAROL G.**  
BA - SUNY Queens College; MA - Boston  
University

**MATTHEWS, PETER K.**  
BS(Geology),BA(Math) - Washington State  
University

**MILLS, PATRICK C.**  
BA - Emory University; M.Ed. - Georgia  
State University

**MOFFETT, DAVID L.**  
BS - University of Illinois

**OESTRIKE, RICHARD, JR.**  
AB - Franklin and Marshall; MS - Univer-  
sity of Illinois  
Oestrike, Richard and R. James Kirk-  
patrick, The Endion Sill, Duluth,  
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the Fossil Galapagos Rise and the  
Nazca Plate, Marine Geology, 49,  
115-132.

**OU, JOYCE LING-MEI**  
BS - National Taiwan University

**OWEN, MICHAEL R.**  
BA - Earlham College; MS - University of  
Illinois

**PLEIBEL, TERRIE L.**  
BS - University of Alabama

**POPP, BRIAN N.**  
BS - University of Michigan; MS - Uni-  
versity of Illinois

**REICHELDERFER, JAN L.**  
BS - University of Delaware

**RODRIGUEZ, NANCY M.**  
BA - Wellesley College

**SMITH, LAURA A.**  
BS - Rensselaer Polytechnic Institute

**STUMP, PETER**  
BS - Richard Stockton State College

**SU, WEN-JUNE**  
BS - College of Chinese Culture; MS -  
National Taiwan University

**TARGOS, KATHLEEN A.**  
BA - Northwestern University

**TREWORGY, JANIS D.**  
BS - Principia College

**VAIDEN, ROBERT C.**  
BA - Rockford College

**VERGO, NORMA**  
BA - Colgate University

**VON BERGEN, DONALD**  
BS - Wheaton College

**WEIBEL, CARL P.**  
BS - University of Wisconsin; MS - Uni-  
versity of Illinois  
A functional morphologic analog for  
syringopoid corals, G.S.A. Ab-  
stracts with Programs, 1983.

**WINSTON, RICHARD**  
BS,AB - West Virginia University; MS -  
University of Illinois

**WOLFF, BRENO**  
BS - Universidade Federal do Rio Grande  
do Sul; MS - University of Illinois

**WOO, KYUNG SIK**  
BS - Seoul National University; MS -  
Texas A&M University

**YANG, WANG-HONG**  
BS - National Taiwan University

\*\*\*\*\*  
Are you a member of the Alumni Association? See Back Cover for the application form.  
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## Geology Banquet

The Second Annual Geology Banquet, sponsored by the graduate students to honor the graduating seniors was held at the University Inn on March 12, 1983. The dinner dance was well attended with 150+ faculty, staff alumni and students. The buffet dinner was followed by a short program at which Dr. John Hower read the names of the graduating seniors and those receiving M.S. and Ph.D. degrees. Susan Frey was named the outstanding senior and received the traditional Brunton compass.

Norma Vergo presented a Crooks tube x-ray generator as a teaching aid to John Hower to show John how much everyone appreciated his work as department head, advisor, teacher and researcher. Linda Bonnell presented George Klein with a plastic geopick for being the most outstanding professor in the field. Slides of each nominee for the award (outstanding in the field) were shown prior to the presentation. Tom Anderson was given the first memorial Arthur Murrey

Award for his dancing prowess and Dave Anderson, the newly appointed department head, was given the honor of being the professor with the most savoir-faire. This award is the Geology department's equivalent of Movieland's Oscar and is called the Alberto (named after last year's big winner Alberto Neito. The longevity award presented to the graduate student who has been in the department the longest went to Dave Beiler who, though he had passed his defense had not yet deposited his thesis by the time of the banquet. Michael Owen, the first runner-up presented the award to Dave.

The attendance at the year's banquet was about double last year and we hope it continues to grow--particularly with a greater alumni attendance. All alumni are welcome and inquiries regarding the spring banquet can be mailed to: Geology Banquet, Dept. of Geol., Univ. of Illinois, 1301 W. Green St., Urbana, IL 61801

## Commencement Reception

Two Commencement Ceremonies were held on May 15, 1983. The Geology Department was included in the morning commencement ceremony held in Memorial Stadium with a reception buffet in the Colonial Room at the Illini Union following the commencement. The department invited all B.S., M.S. and Ph.D. graduates from August '82 to May '83 to the reception and had a fantastic response. Dean Kenneth Andersen represented LAS College and out of 49 people invited, 43 responded and 20 graduates attended with guests, faculty

and staff, bringing the crowd attending to 90 people. Dr. and Mrs. White provided carnations for each graduate student as a special recognition from them. The occasion was an informal opportunity for families, faculty and staff to exchange congratulations, therefore no speeches were given. The reception was received well by all, and the department hopes to continue having commencement receptions for their graduates for many years to come.



Faculty



Attending  
83 Spring Banquet



# Geology Spring Banquet





# Degrees Granted

## BACHELOR DEGREES GRANTED IN 1982-1983

During the 1982-1983 academic year, undergraduate degrees were awarded to 26 geology students. There were 13 in the Geology Curriculum and 13 in the Field of Concentration in Geology in the Science and Letters Curriculum. The following is a listing of the graduates, their degree, honors, thesis titles, and research advisor.

### August 1982

**BRANDABUR, THERESA M.**

BS - Geology Curriculum

**BURNS, MARGARET M.**

BS - Field of Concentration

**MOORE, DAVID N.**

BS - Field of Concentration

**QUINN, JOHN P.**

AB - Field of Concentration

**SAUNDERS, MARGARET M.**

AB - Geology Curriculum

**VANDLIK, JOHN M.**

BS - Field of Concentration

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### October 1982

**GEIL, SHARON ANNE**

BS - Geology Curriculum

- Departmental Distinction

Thesis Title: Analysis of Sesquioxide-rich layers at Tulipe, Ecuador; C. J. Mann, Advisor

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### January 1983

**BURGESS, STEVEN P.**

BS - Geology Curriculum

**GOMEZ, FELIPE N.**

BS - Field of Concentration

**KUHN, ANTHONY C.**

BS - Field of Concentration

**MEYER, MICHAEL D.**

BS - Field of Concentration

**THIEL, DAVID S.**

BS - Field of Concentration

**VAN ALLEN, KERRY W.**

BS - Field of Concentration

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### May 1983

**ANDERSON, RICHARD J.**

BS - Geology Curriculum

**BALSAMO, JEANNINE**

BS - Field of Concentration

**BENSON, VICKI L.**

BS - Geology Curriculum

**CAHILL, LIZABETH C.**

BS - Geology Curriculum

Thesis Title: Oxygen isotope record of coccoliths in Pacific cores; T. F. Anderson, Advisor

**FIEBER, LAWRENCE L.**

BS - Field of Concentration

**FREY, SUSAN E.**

BS - Geology Curriculum

- awarded a Brunton compass at the Annual Geology Banquet at the University Inn, March 12, 1983 for the Geology Alumni Association Most Outstanding Senior Award

- Cum Laude

- Departmental Distinction

Thesis Title: Preliminary study of tidal energy dissipation in Paleozoic shallow seas; C. J. Mann, Advisor

**GIERLOWSKI, THERESA C.**

BS Geology Curriculum

- Departmental Distinction

Thesis Title: Corals from the Late Ordovician Bighorn Dolomite, Bighorn Mountain, Sheridan County, Wyoming; R. L. Langenheim, Advisor

**HAUCK, PATRICE A.**

BS - Field of Concentration

**HELMICK, DAVID R.**

BS - Field of Concentration

**HODGE, ALISON B.**

BS - Field of Concentration

**KIWIET, ELSA M.**

BS - Field of Concentration

**KRUGER, JOHN M.**

BS - Geology Curriculum

Thesis Title: Sulfur isotopes in the Devonian New Albany Shale; T. F. Anderson, Advisor

**MIKULIC, JOANNE K.**

BS - Field of Concentration

- Cum Laude

- Departmental Distinction

Thesis Title: Calcareous and ferruginous oolites at the Ordovician - Silurian boundary in Illinois; R. L. Langenheim, Advisor

**NEWMAN, STEPHEN L.**

BS Geology Curriculum

- Departmental Distinction

Thesis Title: Subsurface geology of Upper Valmeyeran and Lower Chesterian (Late Mississippian strata from a portion of central Illinois; C. J. Mann, Advisor

**PLOMB, DANIEL J.**  
BS - Geology Curriculum  
**PRESTON, SUSAN**  
BS - Field of Concentration in Geology  
**ROSE, DEANE M.**  
BS - Geology Curriculum

Thesis Title: Geologic map and cross section of the central portion of Arrow Canyon Quadrangle, Clark Co., Nevada; R. L. Langenheim, Advisor  
**ROSS, JEFFREY A.**  
BS - Geology Curriculum  
**TURNER, JEFFREY S.**  
BS - Geology Curriculum

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#### MASTER OF SCIENCE DEGREES GRANTED IN 1982-83

During the 1982-83 academic year, master of science degrees were awarded to 10 geology students. The following is a listing of the graduates, their thesis titles, and their places of employment.

##### August 1982

**FRYER, HELENE F.**  
(D. E. Anderson, Advisor)  
Continuing work on Ph.D. degree at the University of Illinois, Urbana, IL  
**WEIBEL, CARL P.**  
(R. L. Langenheim, Advisor)  
Thesis Title: Systematics, biostratigraphy and paleoenvironment of Morrowan and Atokan syringoporid corals of the Bird Spring Group, Arrow Canyon Range, Clark County, Nevada  
Continuing work on Ph.D. degree at the University of Illinois, Urbana, IL

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##### October 1982

**FOOTE, GARY R.**  
(A. S. Nieto, Advisor)  
Thesis Title: Fracture analysis in Northeastern Illinois and Northern Indiana  
Amoco Production Company  
Houston, TX 77077  
**HASKIN, MARK A.**  
(C. J. Mann, Advisor)  
Thesis Title: Archeological geology of Tulipe, Ecuador  
Chevron USA Inc.  
P.O. Box 51743  
Lafayette, LA 70505

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##### January 1983

**BERTANI, RENATO T.**  
(A. V. Carozzi, Advisor)  
Continuing work on Ph.D. degree at the University of Illinois

**LAUBACH, STEPHEN E.**  
(D. E. Anderson, Advisor)  
Thesis Title: Structural processes in the Conway Rhyolite Dome: magmatic implications  
Continuing work on Ph.D. degree at the University of Illinois, Urbana, IL  
**OESTRIKE, RICHARD W., JR.**  
(R. J. Kirkpatrick, Advisor)  
Thesis Title: The Endion Sill, Duluth, Minnesota: mineralogy and petrology of a composite intrusion  
Continuing work on Ph.D. degree at the University of Illinois, Urbana, IL  
**WOLFF, BRENO**  
(A. V. Carozzi, Advisor)  
Continuing work on Ph.D. degree at the University of Illinois, Urbana, IL

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##### May 1983

**SWEET, MICHAEL L.**  
(R. L. Langenheim, Advisor)  
Thesis Title: A paleoenvironmental analysis of the Late Missourian (Pennsylvanian) bonpas limestone member, Mattoon Formation, East-Central Illinois  
Getty Oil  
4005 NW Expressway  
Oklahoma City, OK 73116  
**WESTGATE, LINDA M.**  
(T. F. Anderson, Advisor)  
Thesis Title: Variations in ratios of sulfur isotopes in the Herrin (No. 6) Coal Member of Illinois

## DOCTORAL DEGREES GRANTED IN 1982-83

During the 1982-83 academic year, doctoral degrees were awarded to 7 geology students. The following is a listing of the graduates, their thesis titles, and their places of employment:

### October 1982

#### POLLOCK, DAVID W.

(P. A. Domenico, Advisor)

Thesis Title: Fluid flow and energy transport in a high-level radioactive waste repository in unsaturated alluvium

U.S. Geological Survey

Mail Stop 431

Reston, VA 22092

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### January 1983

#### HAYDON, PAUL R.

(D. L. Graf, Advisor)

Thesis Title: Ion filtration and stable oxygen isotopic fractionation resulting from the passage of sodium calcium chloride brine through compacted smectite layers at elevated temperatures and pressures

Shell Oil Company

P.O. Box 991

Houston, TX 77001

#### KUO, LUNG-CHUAN J.

(R. J. Kirkpatrick, Advisor)

Thesis Title: Kinetics of crystal dissolution in the system diopside-forsterite-silica

Department of Geological Sciences

The University of Michigan

1006 C. C. Little Building

Ann Arbor, MI 48109

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#### OKHRAVI, RASOOL

(A. V. Carozzi, Advisor)

Thesis Title: Carbonate microfacies and depositional environments of the Joachim Dolomite (Middle Ordovician), Southeast Missouri and Southern Illinois, U.S.A.

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### May 1983

#### BIELER, DAVID B.

(D. E. Anderson, Advisor)

Thesis Title: Melanges and glaucophanic schists of the Mona Complex (Precambrian), Southeast Anglesey, North Wales

Department of Geology

Memphis State University

Memphis, TN 38152

#### FEIZNIA, SADAT

(A. V. Carozzi, Advisor)

Thesis Title: Depositional and diagenetic environments of carbonate-siliciclastic rocks of the Glen Dean Formation (Upper Mississippian), Illinois Basin, U.S.A.

#### SCHRODT, JOSEPH K.

(A. S. Nieto)

Thesis Title: Temperature and axial strain rate effects on micromechanical behavior in triaxially compressed marbles

SOHIO

5400 LBJ FRWY

Dallas, TX 75234

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## NEW STUDENT JOURNAL

In the Spring of 1983 the graduate students began publishing the "Journal of the Geological Society of the Vermilion River". The purpose of the Journal is to publish short articles and abstracts of completed and continuing geological research by members of the Geology and Geography Departments, including undergraduate senior theses, dissertation proposals and on-going research projects. The Journal will be published four times a year and the Geology Graduate Student Association re-

quests articles and abstracts from undergraduate and graduate students, faculty and alumni. It is also planned to organize quarterly meetings of the Geological Society of the Vermilion River for geoscientists in and around the Champaign-Urbana area. We would welcome participation and suggestions. Subscriptions for the Journal are available at \$4 per year from the Geology Graduate Student Association, Dept. of Geology, 245 Natural History Bldg., 1301 W. Green, Urbana, IL 61801.



# Alumni Notes

**Editors Note** - Some of the following information came from notes and letters to the department, some via Christmas cards and letters to faculty (thanks to Don Henderson, Hilt Johnson, Ralph Langenheim and George White for sharing), some by word of mouth at GSA, AAPG and AGU, and some people visited the department while passing through. We want to hear from you too. Please take a minute now to fill in the questionnaire on page 56 for use in the 83-84 newsletter.

**AMES, JOHN A.**

MS 1950

"Since the Fall 1978, I have been a faculty member at Wright State Univ. Of interest for the alumni news is that beginning in the Fall 1982, I have been promoted to Associate Professor in the Department of Geological Sciences." (Sr. Consultant, Dravo Corp., Pittsburgh).

**BABB, ROBERT F., II**

PhD 1981

Married Laurie Hartline on January 15, 1983. They are living in Midland, TX and Bob is working for Gulf Science and Technical Co., in Houston.

**BENKOVICH, ALICE**

AB 1981

As of September 1982, Alice is with ARCO Exploration Company, in Denver.

**BURNETT, GERALD A.**

BS 1964

"Is at the Univ. of Washington, and is majoring in Psychology. He was in Naval services 4 years in the Hawaiian area after graduation from U. of I., then he changed to Psychology where he has received his degree and now intends to enter graduate school this fall. His mother, Ethel Burnett."

**BIRCH, BECKY**

BS 1981

Information from R. Langenheim says that she is living incognito in sunny CA. Oakland, to be exact.

**BOARDMAN, RICHARD S.**

BS 1948, MS 1952, PhD 1955

Curator, Dept. of Paleobiology at the National Museum of Natural History in Washington. Dr. Boardman wrote expressing his desire to be listed in the directory this year so people wouldn't get the impression that he was deceased.

**BORN, STEPHEN M.**

BS 1961

"Really appreciated receiving the 27th Annual Newsletter of the department.

Remembering that H. Johnson was my TA in geomorphology and D. Blake was a fellow student makes me realize that the geologic clock has continued to tick. I am serving my last of four years as chairman of the Dept. of Urban and Regional Planning, U. of WI., Madison and U. of WI. Extension. I am also on the Inst. for Environmental Studies faculty and have been associated with the water, land, and energy resources programs. I continue to take strong interest in the application of science and technology to societal problem solving. For the past year I have been working with the State Legislature developing ground water protection legislation."

**BROSSMAN, JIM**

BS 1974

Hydrologist, U.S. EPA, Chicago, IL. "Since my graduation from U. of I. in August, 1974, I have worked at the IL State Geological Survey, the Illinois Environmental Protection Agency. I have recently completed my thesis on the surficial deposits of Kendall County, IL, and will receive my M.S. from Northern IL Univ. in December of 1982."

**CARDOTT, BRIAN**

BS 1977

We didn't receive the following in time to publish last year, "Please announce in the next alumni news the birth of our baby girl, Lauren Alexis, born March 8, 1982. Brian is a coal geologist at the OK Geological Survey in Norman, OK where we are now living. Brian and Kathy (Rieck '78) Cardott."

**CLOOS, MARK**

BS 1976, PhD (UCLA)

Mark attended the Alumni Cocktail Party at GSA, October 18, 1982 and gave us word that he was working for the Univ. of Texas at Austin in Structural Geology.



**COHEE, GEORGE V.**

BS 1931, MS 1932, PhD 1937

"Your 27th Annual Newsletter is excellent. Mrs. Cohee and I thoroughly enjoyed every page! Enclosed is a check to help out a little on the next one. It is good to have the news about our old friends. I will always be thankful to Jackson S. Young who is listed in the Directory, for his advice to go into Geology. I have had a very happy life of travel in the U.S., Canada, Mexico, and Europe seeing the Geology of those areas. Pat, I forgot to mention that I had been Chairman of the U.S. Geological Survey's Geologic Names Committee for 25 years when I retired in 1977. Mrs. Cohee joins me in sending our best wishes and kindest regards to the Department. We were married 52 years ago when I was a student there at Illinois."

**CONNOR, CHARLES B. (Chuck)**

AB 1982, BS 1982

Dept. of Earth Sciences, Dartmouth College, Hanover, NH.

**CORCHARY, GEORGE S.**

MS 1959

"Retired from U.S. Geological Survey, December 26, 1981. Since then have been staff member of Los Alamos National Laboratory, Los Alamos, NM, and working primarily at the Nevada Test Site on Nuclear Waste Management Project. After 37 years with the Federal Government, and perhaps 2 years with the LANL, it may be time in 1983 to hang it up entirely in geology, probably for property (forested) management in Wisconsin where the family can spend working summers. The southern Nevada desert may claim us for the rest of the year, but the Denver area can also be habit forming!"

**DEIBEL, JOHN**

AB 1948

"The information given in the last Newsletter is correct. I would like to add that I retired from the Bureau of Indian Affairs on October 1, 1982. I'm presently consulting for them and am establishing or launching forth into the consulting field at this time. If and when the oil business overcomes the September Penn Square Bank failure and demise, I plan to drill some wells in Osage, Okmulgee and Creek Counties in Oklahoma. Thank you for the Annual Newsletter and best wishes to each of

you and my past instructors (1946-48) that are still active."

**DYTRYCH, WILLIAM**

BS 1981

Blacksburg, VA. "With a new academic year about to begin, I wanted to let you know of my progress during the one just past. I'm working under Dr. Gibbs on a project involving optimisation of the geometries of molecules containing second row elements. Hopefully, we will be able to draw conclusions about the radii of these ions, with a particular interest in the radius of oxygen. Much of my course work has been the mathematics and chemistry departments, and I've managed to keep a 3.5 GPA as well! I want to thank you for your help and advice and make myself available to help any students interested in V.P.I."

**ERICKSON, MICHAEL J.**

BS 1981

Precision Well Logging Inc., Houston, TX.

**EVANS, BETTY**

BS 1978

"I still love Houston, Texas but miss Illinois. I am now working for Getty Oil Company at their Research Center as a Geologist. I am also going to the Univ. of Houston at night and am enrolled in the Graduate program in Geology."

**FIGUEIREDO-FILHO, PAULO M.**

MS 1963

Paulo is Gerente Regional of Empresas Nucleares Brasileiras-Nuclebras in Goiania, GO, Brazil.

**HEPBURN, JUDY**

BS 1969, PhD 1976 (Harvard)

We talked to Judy at GSA in New Orleans last fall. She has formed her own consulting company called Waban Geoscience, consulting in oil and nuclear wastes.

**HETHERINGTON, PETE**

BS 1979, MS 1981 (Univ. of KY)

Pete was at GSA in New Orleans and stopped by the Alumni Cocktail party. After receiving his MS in Kentucky he joined Chevron USA and is now in Lafayette, LA.

**HO, CHUN SUN**

Post-Grad 1955-56

Prof. Ho has been elected to Marquis Who's Who in the World. He served as a Prof. of Geology at the National Taiwan Univ. 1957-74 and Prof. of Geology at

National Normal Univ. Taiwan 1960 to present. He is a member of AAPG, Geol. Soc. of China, and Sigma Xi. He authored "Economic Minerals of Taiwan, 1963; An Introduction to the Geology of Taiwan, 1975 and was chief editor of the Geologic Map of Taiwan, 1974 and Tectonic Map of Taiwan, 1978.

**KULL, DAVID J.**

BS 1948

Is Executive Director, Planning WYOBEN, Inc. in Billings, MT.

**KUO, LUNG-CHUAN**

MS 1980, PhD 1982

Lung-Chuan, his wife and daughter came back for the first Geology Commencement Reception Buffet. He is currently Post Doc Scholar in the Dept. of Geological Sciences at the U. of MI. in Ann Arbor, MI.

**LANE, DONALD W.**

MS 1958

Consulting Geologist, Houston Texas.

**LARSON, DAVID W.**

BS 1975

Dept. of Geology, Hamilton College, Clinton, NY.

**LANTZ, RIK**

BS 1982

Currently working on MS in "Structure from the rock mechanics point of view" at Dept. of Geosciences, Tucson, U. of AZ.

**LEE, SEKYUNG**

PhD 1979

Chung Nam, Korea. Dr. Lee was visiting the department in September of 1982 while on his way to Washington D.C. He is with the Korea Standards Research Institute.

**LINDLEY, KEITH**

BS 1937

"You know I'm not really a geologist. There were three of us ('37) that were all ME's, but we all took 17 hours of Geology I believe it was. That was back in the days of DeWolfe, Sutton, and Howard. I thought they were all great guys and excellent teachers. I particularly liked Sutton. Since Lafayette is my home most of my activities have been directed to this area and the University here. The University has been kind to me in setting up a \$50,000 endowed professorship for engineering professors in the University. I too am quite proud of the endowed scholarship fund which I

created for Honors Program students in science or engineering. It currently pays the tuition (plus) for two students each year. Since retiring from SUN, I have continued as chairman of the drilling school here. That's all a gratis thing that keeps me pretty busy... P.S. I do keep up with Wallace Lansford. I had him in some Applied Mechanics courses. He's retired and we stopped in Champaign and saw him in the summer of '81. I heard from him at Christmas."

**LUHR, JIM**

BS 1975, MA PhD(UC-Berkeley)

Jim attended the GSA Alumni party in New Orleans and gave us a new address for the directory. He is a Research Associate at the Dept. of Geology and Geophysics, U of C, Berkeley, CA.

**LUKERT, MICHAEL**

PhD 1965

Professor in the Dept. of Geosciences, Edinboro State College, Edinboro, PA.

**MAAS, PATRICIA J.**

BS 1977

"I began employment in 1981 with Teknica, Incorporated, a small geological consulting firm in Houston, where I work as a consulting geophysicist doing seismic data interpretation for oil exploration. We are currently completing work on a reservoir analysis of the Gulf of Paria, for Lagoven, a Venezuelan oil company, offshore Venezuela ..."

**MARSAGLIA, KATHY**

BS 1979, MS 1982

Houston, Texas. Attended Spring Banquet.

**MANSHOLT, M. SCOTT**

BS 1982

Attending Southern Illinois University at Carbondale, IL.

**McCOMAS, MURRAY R.**

PhD 1969

President of M.R. McComas and Assocs., Inc. in Broken Arrow, OK.

**MEYER, GARY N.**

BS 1975

Minnesota Geological Survey in St. Paul, MN.

**MUELLER, JOSEPH C.**

BS 1954, MS 1955

Woodlands, TX. "Have been in international petroleum exploration since 1959 and still find it stimulating. My current position as Senior Geological Advisor for Conoco allows me to work on regional geologic studies and basin eva-

valuations for purposes of acreage acquisitions. Foreign travel is a part of the job with a recent two week trip to Indonesia concerning Sumatran exploration and a four day trip to London for Italian exploration during the last couple of months."

**MUROWCHICK, JAMES B.**

BS 1976, MS 1979(Penn State)

Jim stopped by the GSA Alumni party, October 18, 1982 and gave us this bit of information: "Still a student! I've been at Penn State since 1976, got my MS in 1979 (Mineral Precipitation from Salton Sea Brines) and have been working on Pyrtle/Marcasite Precipitation after abandoning a previous PhD project."

**NICKELL, ROSA M.**

Department Secretary, 1931-1967

"Greetings to all friends of the department, especially to G. W. White, Scott, Langenheim, Johnson, Henderson, Carozzi and any I may have missed. I'm still "up and going" every chance I get! No exciting travels; reasonably good health, most of my teeth! so good appetite!!"

**PERKINS, TOM**

BS 1972

Tom has recently been transferred by Occidental from Bakersfield, CA to Sydney, Australia where he is now Occidental's Exploration Manager in charge of exploration in the Gippsland Basin. He reported in December '82 that they were currently drilling their second exploratory well. So far they have found only some non-commercial gas.

**PIERCE, JACK**

BS 1949, MS 1950

Jack, Beverly (Salliday) and their daughter stopped in at the department for a short visit in August 1982.

**PLUSQUELLEC, PAUL**

MS 1966, PhD 1968

Exploration Manager of Natomas North America in Tulsa, OK.

**RASMUSSEN, HAROLD**

BS 1954

Exploration Manager of Wainoco Oil and Gas Co. in Traverse City, MI.

**REINBOLD, MARK**

MS 1977

Transferred to Arco Exploration, Denver, and is working on Williston Basin. Had been in Arco Coal which merged with Anaconda, an Arco subsidi-

ary, which then terminated the coal exploration program.

**RICE, WILLIAM D.**

MS 1974

Working with Wisconsin Electric Power Co. in Iron Mountain, MI. Now stationed in Upper Michigan as the resident geologist. His work consists of keeping track of weather data and river flow in order to efficiently operate thirteen dams and two runoff reservoirs in the Menominee River drainage basin for hydroelectric power. He also is concerned with keeping track of mineral developments affecting land belonging to his company. He also reports the arrival of a second child in April.

**RICH, DAVE**

MS 1977, PhD 1980

"Still living in Colorado and working for Sabine, looking for oil in the Powder River Basin, WY. Toni and I are preparing for an offspring, our second, due in March. We see a constant stream of other alumni (and current students) here in Denver, some to stay, some just passing through."

**ROTH, ROBERT S.**

MS 1950, PhD 1951

Bob visited the Department on June 7, 1983 and told us he is with the National Bureau of Standards, Washington D.C. and has kept busy as Sr. Editor of Vols. IV and V (1981-83) of Phase diagrams for Ceramusts. He was Administrative Head of Vols. I and II. The volumes are being co-sponsored by NBS and the American Ceramic Society of which he is a member.

**SCHAFER, E. W.**

BS 1950

Sr. Vice President, Manufacturers Hanover Trust in New York City.

**KSCHIEHING, MARK**

MS 1978

"I've finished up at PA (defended on the 15th of Sept. '82) and have moved to Dallas to work for ARCO Exploration. For the first year I'm in a trainee position with the Geological Research Group."

**SCHEEVEL, JAY**

BS 1979

Is working for Chevron in Denver.

**SCHNEIDERMAN, NAHUM**

PhD 1972

Is Manager of Stratigraphic Sciences Dept., Houston Technology Center, Gulf Oil Exploration and Production Co. He is



the newly appointed chairman of the AAPG Committee on Stratigraphic Correlations, member of the SEPM Research Committee, and AAPG Research Activities Committee. Nahum is an Associate Editor of the Journal of Sedimentary Petrology and the Geo-Marine Letters. He is also organizing a SEPM Research Symposium entitled, "Carbonate Cements Revisited" to be held during the 1983 Annual AAPG-SEPM Convention in Dallas, TX."

**STEINMETZ, JOHN C.**

BS 1969, MS 1975, PhD 1977 (U. of Miami)

John is Advanced Research Geologist, with Marathon Oil Co. in Denver doing research in micropaleontology and biostratigraphy with an emphasis on numerical and computer methods applied to biostratigraphic data. From 1977 to '82 he was Assist. Professor in the Marine Science Dept. at the Univ. of South Florida in St. Petersburg.

**SMITH, PORTIA ALLYN**

BS 1938

Retired from ISGS in 1975. "Enjoyed Newsletter but know very few names these days."

**SWEENEY, JERRY J.**

BS EE 1969, MS EE 1970, PhD Geol 1980

Working with Lawrence Livermore National Lab Geology and geophysics section doing geological mapping and fault hazard evaluation, geology and neogene tectonics of Livermore Valley. Geologic mapping and electrical resistivity studies related to hazardous waste assessment in dry landfills, California Coast Ranges. "Besides doing the above, I have been teaching Introductory Physical Geology and Geology of the Western U.S.

at Chabot Community College, Valley campus. Presently I am teaching Advanced Structural Geology at San Jose State Univ." (We saw Jerry at the GSA Alumni Cocktail party in New Orleans)

**VELBEL, DANITA (Brandt)**

BS 1978

"Great job on the newsletter. I especially appreciate the Directory and finding out where my classmates are. My news: married Sept. 11, '82 to Michael A. Velbel, also a geology PhD student at Yale. I will become Mrs. V., but I will retain my family name as a middle name for publications."

**WOBBER, FRANK**

MS 1961

With Office of Energy Research, U.S. Dept. of Energy in Washington DC. "Spent four years as senior scientist at the Congressional Office of Technology Assessment completing projects in federal coal leasing, strategic minerals and Alaska lands for Committees of the U.S. Congress. Now responsible for research in geology and hydrology related to fossil fuels.

**WYLD, SANDRA**

BS 1982

Is at the Dept. of Geology and Geophysics, Univ. of CA at Berkeley.

**YUND, RICHARD**

BS 1956, PhD 1960

Presented a Colloquium in the dept. D. M. Henderson presented the Richard A. Yund Memorial Furnace with a suitable certificate. Yund in turn presented DMH with his old Honors Thesis from Brown Univ.



## GSA Alumni Cocktail Party





# News Releases

**RICHARD L. BERGER** was named a Fellow of the American Ceramic Society at ceremonies held in Chicago at the Conrad Hilton as part of the Society's 85th Annual Meeting and Exposition. Dr. Berger is professor of civil engineering and ceramic engineering at the Univ. of Illinois, Urbana. He received his BS degree in geology in 1958 from the U of I, where he also earned his master's and doctorate.

*(Taken from ACS, Inc. News Release - April 1983)*

**FRED A. DONATH**, GSA Fellow, was appointed a hearing panelist by the U.S. Department of Energy for two of the five public hearings in March on proposed general guidelines for the recommendation of repository sites for high-level radioactive waste and spent fuel. Donath served as an expert in the geosciences during the hearings in New Orleans and in Washington, D.C. Donath is Director and Principal Geoscientist with Ertec Western, Inc., Long Beach, CA. He has served as a consultant to the U.S. Nuclear Regulatory Commission and Sandia National Laboratories, in Albuquerque, New Mexico, and as an advisor to the Office of Science and Technology Policy. He was formerly a faculty member of Columbia Univ. and a professor and head of the Department of Geology at the Univ. of Illinois in Urbana.

*(Taken from GSA News and Information May 1983)*

**GEORGE E. HEIM**, an engineering geologist and 1963 PhD from the Univ. of Illinois Geology Department has been appointed chief geologist for the Battelle Project Management Division of the Office of Nuclear Waste Isolation. Dr. Heim was head of the Chicago office of Harding Lawson Associates. He worked for the Missouri Geological Survey and taught at the Univ. of Wisconsin before entering private industry in 1966 with Harza Engineering Co. He later was with the Chicago offices of Dames & Moore and Sargent & Lundy. He has worked on coal, nuclear, and hydro power plant projects and has been involved in mining and tunneling projects, ground water investigations and geophysical exploration programs.

*(Taken from Battelle Information - October 1982)*

**GEORGE H. KELLER**, U of I, PhD 1966, has been named Dean of Research at Oregon State Univ. effective January 1, 1983. Dr. Keller was named Acting Dean of Research in September 1981 and has helped build and broaden the base of the OSU research program. Keller will retain his academic title of Professor of Oceanography but will end his administrative duties in the School of Oceanography, where he has been Associate Dean since November 1975 with an interim period as Acting Dean from June 1976 to July 1978. Keller continues to be heavily involved in national advisory committees, working with such federal agencies as the National Science Foundation and the Departments of Commerce and Interior in the areas of marine science and academic research vessel operations.

*(Taken from OSU Dept. of Information - December 1982)*

**MORRIS W. LEIGHTON**, chief geologist of Esso InterAmerica Inc., Coral Gables, Florida, will become chief of the Illinois State Geological Survey in September succeeding Robert E. Bergstrom. Leighton is the son of Morris M. Leighton who was chief of the Illinois Geological Survey from 1923 to 1954. A native of Urbana and a graduate of Urbana High School in 1944, Leighton earned a BS degree in chemistry from the Univ. of Illinois in 1947 and MS and PhD degrees in geology from the Univ. of Chicago in 1948 and 1951 respectively. He has been chief geologist for Esso InterAmerica since 1974, with the responsibility of directing assessments of the oil and gas potential of Central and South America and for recommending acreages for acquisition. He has been employed by affiliates of the Exxon Corporation for 32 years and will retire from his present position September 15, 1983. He is a fellow of GSA, a member of the AAPG, the Miami Geological Society, the AIPG and is a certified petroleum geologist.

*(Taken from ENR News Release June 1983)*

**FRANK OSMENT** retires from Standard Oil Co., Indiana as of September 1983 after 36 years with the company. Frank re-

ceived his master's degree from the Univ. of Illinois and joined Standard as a geological scout in Shreveport, LA after the war. He was rapidly promoted from field work to increasingly greater responsibility as a decision maker and carried out management assignments in Houston, Tulsa, and Canada where he was manager of the Canadian division from 1959 to 1964. Osment became Vice President of Standard in 1965 with worldwide staff coordinating responsibilities for oil and gas exploration. Two years later he was elected president of Amoco International and a director of Standard. In 1974 he was elected to his post as Executive Vice President of the parent company. Osment has not made definite retirement commitments, but plans to continue to be active in the oil industry or in government.

*(Taken from Span 1982, No. 4)*

**SANDRA M. SOPKIN** has joined Tenneco Oil Exploration and Production's Western Rocky Mountain Division as a geophysicist in Denver. Sopkin received a Bachelor of Science Degree in Geology from the University of Illinois in 1980 and a Master of Science Degree in Geophysics from the Pennsylvania State Univ., Univ. Park, PA earlier in 1982. *(Taken from Tenneco Inc. News Release - October 1982)*

**GEORGE W. WHITE**, the publication of Bulletin 68, Glacial Geology of Northeastern Ohio, in 1982 marks the 56th year since George W. White published his first paper on Ohio geology and over a half-century of association with the Division of Geological Survey, two years of which he served as State Geologist [1946-1947].

Dr. White became Head of the Dept. of Geology at the Univ. of Illinois in 1947. He retired from active teaching at the Univ. of Illinois in 1971 and is now emeritus professor of geology.

George has received many honors and accolades throughout his long and productive career. Included among these are honorary degrees from Otterbein College, the Univ. of New Hampshire, and Bowling Green State Univ.; the Orton Award from the Ohio State Univ.; and the naming of the Univ. of Illinois geological library in his honor. In 1981 Dr. White received a Conservation Achievement Award from the Ohio Depart. of Natural Resources and most recently received The History of Geology Award at GSA in New Orleans, Oct. 1982, a HESS publication dedicated to him in 1983. Mrs. White accepted in his behalf a certificate from the Univ. of Illinois Library naming him Honorary Curator.

*(Taken in part, Ohio Geol. Survey NSL)*

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**EDITORS NOTES**--It's been a busy, busy year for everyone so I must acknowledge with thanks the extra work our staff has been willing to do for the Newsletter this year. I especially wish to thank Karolyn Roberts for putting the Newsletter on our CPT Word Processor and urging the editor on when the task seemed to great to tackle. You will note that our format is a little different this year, using columns instead of full page. This hopefully will eliminate wasted space which is costly. Pictures were made available to us by John Hower, Brian Popp, and my husband who took pictures at GSA for me. The collage method was used to give maximum coverage in minimum space. Let us hear from you if you have ideas or thoughts for next year. Our alumni responses were definitely up this year. I hope to see the trend continue.

The directory has been prepared based on the information we now have on CPT disks and may not be the same information on file with the Alumni Office. Although an effort is being made to cross reference the changes with them, we don't always succeed, therefore your directory listing and your mailing label may not be the same. If that should happen, please notify us. - Pat Lane

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# In Memory

## MELVILLE WESTON FULLER (1907-1982)

Mr. Melville Fuller, 75, former Chief Geologist of the Carter Oil Company (now Exxon) and long time Tulsa consultant, died November 18, 1982 in Lafayette, Louisiana. Mr. Fuller received his B.S. from the Univ. of Illinois in 1931 and his M.S. in 1933.

*(Notification Letter from W.A. Newton)*

## HOWARD AUGUSTUS MEYERHOFF (1899-1982)

Dr. Meyerhoff died on March 24, 1982, in Tulsa, Oklahoma at the age of 82. He earned his B.S. in 1920 at the Univ. of Illinois, Urbana, graduating as a Phi Beta Kappa. He earned his Master's Degree in 1922 and Ph.D. in Geology in 1935 at Columbia Univ., and was admitted to full membership in Sigma Xi. In 1955 he received an honorary LLD from Drexel Univ., Philadelphia. In September of 1924 he was appointed Professor of Geology at Smith College in Northampton, Massachusetts and, with many interim national assignments, did not resign that professorship and the chairmanship of the department until 1949. During his graduate studies he served as Curator of Paleontology at Columbia between 1921 and 1924, and later was appointed Visiting Professor at Yale Univ. in 1942, and Chairman of the Department of Geology at the Univ. of Pennsylvania from 1963 to 1967. Meyerhoff's career is detailed prominently in American Men and Women in Science, Who Knows and What, World Who's Who in Science, and Who's Who in America, as well as in several other biographical publications.

*(Excerpt, August 1982 Bulletin of AAPG)*

## CHRISTOFFER OFTEDAHL (1917-1982)

We regret to report the death of Prof. Christoffer Oftedahl, Norwegian Technical Univ., Trondheim, on 24 May, 1982.

Chris (Toffen) was the third of a long line of annual visiting faculty in the department: he was Visiting Assistant Professor here from January, 1950 to January 1951. (Some readers may remember that he lived at E-33A Stadium Terrace. What memories Stadium Terrace evokes!)

It is impossible to do justice to his career in the short space available and one hardly knows where to start in trying to get across at least some idea of his versatility, intellectual and personal

liveliness, friendliness, joie de vivre, continued youthful spirit into his sixties, inexhaustable field stamina, and so on. Some words of the editor of the Norsk Geologisk Tidsskrift help in characterizing Toffen: "Norwegian geology has lost one of its few polyhistor--a specialist in several branches. Oftedahl was also a master at making far-reaching syntheses from the most diverse observations".

Chris was born 28 June, 1917 in Oslo, Norway. He received his university education at the Univ. of Oslo under some of the most outstanding geologists of the world - T.F.W. Barth, V.M. Goldschmidt, O. Holtedahl, among others. He attained his doctorate in 1949. Following his stay with us, he became a geologist with the Norwegian Geological Survey in 1952. In 1959, he succeeded Th. Vogt as Professor at what is now the Norwegian Technical Univ., Trondheim, where he continued until his death.

Chris was involved with an amazing variety of geological problems and commonly was in at the beginning or early stages of many of them: long distance thrusting and crustal shortening, thermal states of feldspars, mineral deposits of all sorts, exhalative ores in sedimentary rocks in particular, cauldron subsidence, and volcanology of all sorts, just to reel off a few that come immediately to mind. He published well over one hundred papers.

He was equally wrapped up with teaching and with students at all levels. He was a great friend of and favorite of students wherever he went. The Geological Student Society of Oslo awarded him the wholly appropriate title "Knight of the Golden Hammer" for his inspiring and memorable leadership on field excursions.

Chris was a great and indefatigable world traveler. The expedition to the banks of the bonnie, bonnie Boneyard probably was his first trek outside Scandinavia. His interest in travel was many dimensioned: geology, of course; scientific meetings; teaching; meeting people; and observing different cultures.

Not surprisingly, Chris was a member of innumerable societies, commissions



and conferences all round the world. He was president of the Geological Society of Norway at the time of his death.

As if all this wasn't enough, Chris was interested in and active in a lot of other things besides geology. He loved classical music and was an enthusiastic pianist; no ppp for Chris! He enjoyed matters political of all sorts, and lots of other things.

His host of friends and admirers all over the world are stunned and saddened by the untimely termination of the life of this vital man by a brain tumor. We are grateful for the fun and excitement we did have in his company and we extend our most sincere sympathy to his wife Magnhild Oftedahl, Solhogdueiene 22, 7000, Trondheim, Norway.

GEORGE M. WILSON (1915-1983)

George M. Wilson of the Illinois State Geol. Survey died unexpectedly in Urbana, Illinois, May 18, at the age of 67. He was formerly a member of the Coal Section and Head of the Educational Extension Unit and has been on disability leave since 1973. He is survived by his wife of 43 years, Jean (Gilbert) Wilson, and two sons, Charles and Arnold. He was born near Potomac, Illinois and attended the Univ. of Illinois, from which he re-

ceived a B.S. in 1942 and an M.S. in geology in 1944. He joined the staff of the Illinois State Geological Survey, where he was a member of the Coal Section from 1942 to 1946 and from 1949 to 1953, Head of the Educational Extension Unit from 1954 to 1960, and a member of the Educational Extension Unit and Industrial Minerals Section from 1965 to 1973. From 1946 to 1948 he was in charge of coal exploration for Walter Bledsoe Company of Terre Haute, Indiana. From 1948 to 1949 he was in charge of coal exploration for Terteling Brothers, Inc., Madisonville, Kentucky, and from 1953 to 1954 he was Chief Geologist for Peabody Coal Co. During his active professional career he was a member of the American Association of Petroleum Geologists, Geological Society of America, Society of Economic Geologists and Paleontologists, Illinois Academy of Science, Illinois Geological Society, Illinois Mining Institute, and Illinois Society of Coal Preparation Engineers and Chemists. The Geology Dept. wishes to express appreciation to the Wilson Family for asking that memorials be sent to the Foundation Geology Fund.

(State Geological Survey, ENR)

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EDITORS NOTE--The following list of people have at one time or another been active in the geology department. If you know anything about their whereabouts we would appreciate hearing from you.

Franklin Dale Adams  
Debby Baldwin  
Vivian Beeler, Jr.  
Bernard Bendiner  
Clyde M. Benford  
William H. Bierschenk  
William H. Bond, Jr.  
Calvin S. Bromfield  
Robert Wesley Brown  
Leola Cockrum  
John A. Culbertson  
Max William David  
Bruce E. Dollahan  
W. T. Erickson  
Jeanne S. Farnum  
Elizabeth Forester  
James D. Herold  
Alvin A. Holston  
Alvin Arthur Holston  
Ronald Jorgensen  
Milton A. Kanji

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George C. Knoll, Jr.  
Rebecca Leefers  
Terry Lehmann  
Paul E. Lewis  
Thomas W. Lynch  
Perry S. McClure  
Walter F. McConnell  
John R. McGregor  
Frank J. Mesaros  
Daniel R. Muhs  
Robert Postels  
Donald R. Ramberg  
Joseph A. Rard  
Anthony S. Rathnau  
Robert Ramon Reynolds  
Henry N. Roler  
Billy R. Roy  
Robert O. Schrott  
Hildreth N. Schultz  
Beverly Schwinn

Mrs. Otto Seiss  
Lyle H. Sleeman, Jr.  
Robert D. Snyder  
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Kenneth A. Stone  
Bruce I. Susong  
Cathy Swengel  
Fred Arthur Tolentino  
Richard L. Vega  
Joseph Vercellino  
John W. Vukovich  
Marvin Walker  
Melvin I. Weldner  
Ronald Lamar Wertman  
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Please use the reverse side of this page if you wish to have information included in the next issue of the Newsletter.

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Mrs. Patricia Lane, Editor  
Department of Geology  
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Urbana, IL 61801







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## DEPARTMENT OF GEOLOGY ALUMNI NEWSLETTER



# THE ALUMNI NEWSLETTER

## DEPARTMENT OF GEOLOGY

University of Illinois at Urbana-Champaign

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THE DEPARTMENT WISHES TO GRATEFULLY ACKNOWLEDGE  
AND THANK ALL THOSE ALUMNI AND FRIENDS  
WHO HAVE OFFERED THEIR SUPPORT THROUGH DONATIONS  
TO THE UNIVERSITY OF ILLINOIS FOUNDATION AND IN MEMORY OF  
COLLEAGUES AND FRIENDS





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ABOUT OUR COVER: As is mentioned in the letter from the Department Head, we may soon be leaving the Natural History Building. This planned move has made many nostalgic so we went to the Alumni Foundation Photo files and found an old picture of our building. Our cover picture was taken in the early fifties. The building has changed very little other than aging. The trees have grown and hedges and vines make more recent pictures unusable. We hope it brings back fond memories. We look forward to being able to use a picture of our new location in a future issue of the Newsletter.





# LETTER FROM THE HEAD

June 13, 1985

Dear Alumni:

This year we have changed both the format and time of publication of the newsletter. In the future we shall produce an Alumni Newsletter and a separate Research Report. The Report is designed to assist our recruitment of graduate students and to advertise the breadth and quality of our graduate research programs. The Newsletter will be sent to all alumni in the late spring or summer. We will gladly send a copy of the Research Report on request (see form at the back of the Newsletter).

Since the publication of the last Newsletter, five new assistant professors have joined the department.

**Stephen Altaner**, a graduate of our department, who is now at the USGS at Reston, will take up the Clay Mineralogy position this August. Steve is especially interested in the kinetics of clay mineral reactions during diagenesis and the application of these studies to petroleum migration, mineral prospecting and nuclear waste disposal. With the complementary research programs of Craig Bethke (computer modeling of clay reactions), Jim Kirkpatrick (NMR studies of clays), Richard Hay (diagenetic alternatives of clays), the addition of Steve will continue the tradition begun by Ralph Grim of clay mineralogy at Illinois.

**Jay Bass**, a graduate of SUNY at Stony Brook, came to the department in 1984 after a post doc at Cal Tech. Jay is an experimental geophysicist concerned with the high temperature, high pressure properties of minerals. Jay is currently putting together a Brillouin Spectroscopy Lab to measure wave velocities in minerals. Jay is also involved in in situ stress measurement in the earth's crust.

A Cal Tech graduate, **Stephen Grand** will join the department in the spring of 1986. Steve is a seismologist whose research includes the construction of three dimension models of the mantle shear structures beneath North America. With the addition of Jay and Steve Grand, we now have four people in our geophysics/seismology program and, for the first time, the ability to establish strong undergraduate/graduate teaching and research programs in crustal and mantle seismology.

After an extended search, the vacant groundwater position was filled by **Craig Bethke**, an Illinois graduate, earlier this year. Craig has played a pioneering role in the application of super computers to the study of the effects of groundwater migration in evolving sedimentary basins on petroleum migration, formation of ore deposits (Mississippi Valley ores) and sediment diagenesis. A recent paper of his on the illitization of smectite received an award from the Clay Mineralogy Society.

**Chu-Yung Chen** joined the department in 1983. A geochemist/petrologist, Chu-Yung is setting up isotope dilution and neutron activation analysis laboratories for the study of trace elements and isotopes in igneous rocks, especially those of the Hawaiian Islands. The results may be used to examine the chemistry and homogeneity of the upper mantle, problems that are of interest to both petrologists and geophysicists.

We also appointed three new adjunct professors last year: **Dr. Morris Leighton**, the new Director of Illinois State Geological Survey; **Dr. Robert Reynolds**, Professor of Geology at Dartmouth College, who has worked extensively in the past few years with Steve Altaner and Craig Bethke and **Dr. Keros Cartwright**, the new head of the General and Environmental Geology Group of the Illinois State Geological Survey and a groundwater geologist.

During the summer of 1984, the department was offered the opportunity to move into the Old Vet Medicine Building on south campus (two blocks east of ISGS on Peabody Drive, next to the Illini Grove). The offer was greeted with mixed feelings by those of us who have lived for many years in the Natural History Building: nostalgia for the idiosyncrasies of NHB and its location versus a growing concern for the irreversible deterioration of NHB. Preliminary plans for the remodelling of the Old Vet. Building which include almost total gutting and rebuilding of the interior to fit geology's needs and some new construction, were completed by a Chicago firm during the fall of 1984. In addition to clean new laboratory space, the new building will provide a magnificent library with complete temperature and humidity control. A request for the \$6,000,000 needed to complete the project is now before Governor Thompson. If funding is approved by the Governor, the move to the new building would probably occur during the latter part of 1987.

For the first time in over a decade, the University is not faced with a near-crisis budget. It will take a long time to make up for minimal salary increases, the deterioration of facilities and equipment, nevertheless, there is a general air of optimism in the air about the University and the department.

David E. Anderson  
Professor and Head

# GEOLOGY FACULTY, STAFF AND STUDENTS

## FACULTY

David E. Anderson, Professor and Head  
Thomas F. Anderson, Professor  
Jay Bass, Asst. Professor  
Cameron Begg, Res. Microprobe Analyst  
Craig Bethke, Asst. Professor  
Daniel B. Blake, Professor  
Albert V. Carozzi, Professor  
Chu-Yung Chen, Asst. Professor  
Wang-Ping Chen, Asst. Professor  
Richard L. Hay, Professor

## ADJUNCT/EMERITUS FACULTY

Leon R. Follmer, Adj./ISGS  
James E. King, Adj./IL State  
Museum Curator  
Morris Leighton, Adj./ISGS  
Jack A. Simon, Adj./ISGS

## NONACADEMIC STAFF

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Eddie L. Lane, Elec. Tech. II  
Patricia Lane, Staff Secretary  
David R. Phillips, Cartographer

## GRADUATE STUDENTS

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Sylvia Couto Anjos  
Snehal Bhagat, Hourly  
Linda Bonnell, Research Asst.  
Lee Anne Burrough, Teaching Asst.  
Beth Cahill, Fellow  
Dae Kyo Cheong  
Nancye H. Dawers, Res. & Teaching Asst.  
Peter Flink, Teaching Asst.  
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Ed Hajic, Teaching Asst.  
Lisa Harstad, Fellow  
David Heidlauf, Teaching Asst.  
Lambok M. Hutasoit  
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Youn-Joung Kim  
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Carol Lepzelter, Research Asst.  
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Charles Weiss, Research Asst.  
Richard Winston, Research Asst.  
Kyung Woo, Res. & Teaching Asst.  
W. H. Yang, Research Asst.

## EDITORS NOTE

A new publication date and a slightly different format has been planned for this and future issues of the Alumni Newsletter. This Newsletter contains information collected from June 1983 to the present.

We received many many answers to our request for information and address changes which have been added to our directory and the response to our call for information about our lost alumni was simply amazing. So do keep in touch, your fellow alumni want to know what is happening to you.

I mentioned a slightly different format. This Newsletter is directed primarily to Alumni and contains less information about the department. We are now publishing a separate research report that zeroes in on the department's research, faculty publications and courses and curricula. This research report will be sent to you by request and will be used primarily as a source of information for those inquiring about the department. If you wish to receive the department information, please indicate your interest on the Alumni Information sheet that is on the back page of this Newsletter.

## DEPARTMENT ACTIVITIES

### **Incorporated Research Institutions for Seismology (IRIS)**

In response to the department's request, the U of I is officially an initial incorporator of the Incorporated Research Institutions for Seismology (IRIS) as of May 12, 1984. IRIS is to serve as the legal focus for large-scale collaborative programs in seismology in the U.S. The Program for the Global Digital Network (PLATO) and the Program for Array Seismic Studies of the Continental Lithosphere (PASSCL) will be organized under the corporation. The computational facilities and the data centers under these two programs will probably outgrow themselves and form a third program involving class VI computer. The organizational concept of IRIS is similar to that of the Joint Oceanographic Institutions (JOI) which represents the U.S. scientific community in the deep sea drilling program. Currently, there are about thirty initial incorporators in IRIS and the membership is expected to eventually include about fifty research institutes in seismology. Both PLATO and PASSCL will provide high quality digital seismic data characterized by broad-band width and wide dynamic range. PLATO will constantly transmit data via satellite communications on a real-time basis while PASSCL will provide dense spacial coverage (~100m spacing) of high frequency data at specific sites. With these exciting new possibilities, a holistic approach to seismology is envisioned and the artificial distinction between exploration and earthquake seismology will probably soon disappear. IRIS is expected to generate about \$5 million of funding per year for each of its two programs. This effort will greatly help transform earth science into one of the "big sciences" and we are very pleased to be part of it. (W-P. Chen)



### **Visiting Scholar from China**

Ms. Yang Baoxing came to our department as a visiting researcher from Changdu College of Geology, Sichuan, China under the sponsorship of George deVries Klein. Ms. Yang graduated from the Department of Petroleum Geology in 1960 and has been teaching Petroleum Geology, Sedimentary Petrology and Sedimentary Facies as well as doing research work in sedimentary facies, diagenesis and the reservoir property. A few of her published articles include: "Micro-facies and reservoir characteristic of Lower Jialingjian Formation, Triassic, South of Sichuan; Classification and evaluation of sandstone reservoirs" and "Pore structure of carbonate reservoirs in Sichuan." During her stay in the Department she has been working with Dr. Klein in sandstone mineralogy and petrology of DSDP, taking courses and taking advantage of the library facilities at the U of I to increase her knowledge in techniques of sedimentology studying and petroleum geology.



### **Do You Remember Field Camp?**

In 1984 the Field Camp had about forty students and seven staff members at Sheridan, WY. The instructional program continued its slow evolution with the introduction of new short term mapping exercises in areas of more complex geology and with expansion of air photo mapping to new areas on top of the range. The mapping groups based themselves in Forest Service campgrounds, returning to Sheridan for preparation of the final maps. In this way the practice of placing more than one mapping party in a single area was cut down and the staff and students had a chance to see and do a few new things. The eastern Wyoming trip was rerouted so that the magnificent new exposures on the 'new' route 14A were visible and, also a visit to the south end of the Beartooth Mountains and Sunlight Basin were possible. This new route eliminated Greybull and Cody where a lot of time got wasted and also cut down on the amount of time spent battling the problems of life in Yellowstone Park. (R. Langenheim)



### **New Computer Terminals Donated to Department**

Our earthquake seismology group has received a generous donation of five computer terminals from Texas Instruments. These terminals are one of the newest model (707) of the renowned Silent Series 700 products. They have a full set of ASCII codes with a built-in modem. The printer head prints in both directions and produces a minimal level of noise while in operation. Dr. Edwin B. Hassler, the U of I's "Champion" (representative of Alumni) at Texas Instruments helped us greatly in obtaining this equipment. These terminals are a boost to our effort in modernizing teaching and research tools in the Department. Currently, they are used by graduate and undergraduate students to access the Cyber 175 and 174 Systems in their research and course work related to the area of seismology and geophysics in general. (W-P. Chen)

### Spring Banquets

Each year since 1982 the Geology Graduate Students have sponsored a spring banquet held at the University Inn. The 1984 banquet was planned by Terrie Pleibel and Steve Adams and included a cocktail hour, buffet meal, slide presentations and light hearted awards to faculty and student(s).



The 1985 Banquet was planned by Lisbeth Cahill, Dave McEachran, and James Matthews. After cocktails, dinner, slides and awards to the faculty the graduating seniors and graduate students were recognized. Dancing followed until the wee hours.



The "This tells me nothing award" for field work above and beyond the call of duty presented to Assistant Professor Steve Marshak and his field workers, Dave McEachran, Phil Kwiecinski and John Tabor

### **Commencement Luncheons**

In 1983, the Department started sponsoring a Commencement Luncheon for its graduates. We have been fortunate to obtain the use of the Colonial Room at the Illini Union each year for our gathering. The Colonial Room offers a quiet relaxed, yet elegant atmosphere in which students and their parents, or guests may have a light lunch and meet, and perhaps say goodbye to faculty and other graduates before leaving for new careers or further education. We have planned the commencement lunch to be without speeches (well just a little one -- the department head does say hello, welcome and good luck) as a time to relax and talk after the busy weeks of finishing up and the frantic pace of commencement activities.



**New Geology Alumni** - 1984 Graduates, attending Commencement Luncheon included:  
Front Row L/R David Powell, BS; Steve Bouchard, BS; Bradley Albrecht, BS; Brian Huff, MS; Heidi Hoffman, BS; Susan Harp, BS; Valla Jones, BS; Karen Lamb, BS;  
Back Row L/R Ibrahima Diaby, PhD; Snehal Bhagat, BS; Dwayne Keagy, BS; Dan Petzold, BS; Dan Petersen, BS



Keith Hackley, MS 1984; Brian Huff, MS 1984

## **Bachelor Degrees Granted – August 1983 – January 1985**

August 1983

**Carolyn S. Arden, Conrad D. Brooks, Joan E. Crockett, Jaymee E. Delaney, George Dreger, Michael A. Hines, Bernard J. Lindsey, Jr., Kathleen M. O'Neil, Thomas E. Ripka**

October 1983

**Linda J. Croll**

January 1984

**Snehal Bhagat, Sheryl A. Chargo, Douglas K. Cowin, John C. Head, Heidi Hoffmann, Ralph A. Nolte, Mark A. Robinson**

May 1984

**Bradley K. Albrecht, Kari A. Bechtle, Stephen M. Bouchard, Kevin F. Downing, Christopher Fielitz, Susan P. Harp, Vallad D. Jones, Dwayne M. Keagy, William M. Kwit, Karen E. Lamb, James G. McDermott, Allen G. Melcer, Elizabeth D. Patterson, Daniel W. Petersen, Daniel D. Petzold, Robert R. Pool, David M. Powell, Todd M. Prevette, Lloyd S. Tromblee, John L. Tyree**

August 1984

**Amy C. Adams, Keith L. Archbold, Louis K. Bergeron, Ronald T. Black, Michael Cacich, Thomas J. Foster, Peter L. Hahn, Robert G. Kaiser, Michael A. Turner**

January 1985

**Edward Delisio, Jefferson L. Gilkeson, Michael Hasek, Carol L. Meyer, Margaret R. Sutter**

## **Master of Science Degrees Granted – 1983–85**

August 1983

**Robert A. Bauer** (Advisor, A. S. Nieto) Thesis Title: Prediction of Compressive Strength from Point-Load and Moisture Content Indices of Highly Anisotropic, Coal-Bearing Strata of the Illinois Basin.

**Alex P. Cardinell** (A. S. Nieto, Advisor) Thesis Title: An Investigation of Mass Movement Structures on the Mississippi River Delta Front Off Southwest Pass.

**Janis D. Treworgy** (D. B. Blake, Advisor)

October 1983

**Zakaria Lasemi** (P. A. Sandberg, Advisor) Thesis Title: Recognition of Original Mineralogy in Micrites and its Genetic and Diagenetic Implications.

January 1984

**Patrick C. Mills**, (R. L. Langenheim, Advisor) Thesis Title: Geology of the Lower Permian Rocks of the Bird Spring Group, Wamp Spring Area, Las Vegas Range, Clark County, Nevada.

**Keith C. Hackley** (T. F. Anderson, Advisor) Thesis Title: Sulfur Isotope Variations in Low-Sulfur Coals from the Rocky Mountain Region

**Bryan G. Huff** (R. L. Langenheim, Advisor) Thesis Title: Brachiopod Systematics, Biostratigraphy and Paleoecology of a Proposed Upper Atokan Stratotype, Arrow Canyon Range, Clark County, Nevada



**Joyce Ling-Mei Ou** (A. V. Carozzi, Advisor) Thesis Title: Petrography, Porosity and Permeability of Chesterian Sandstones (Upper Mississippian) Southern Illinois, U.S.A.

August 1984

**Christine A. Kaszycki** (W. H. Johnson, Advisor)

**Hye-Sun Kim** (J.T. Holder and A. T. Hsui, Advisors) Thesis Title: Measured Dislocation Density Variations During Creep of Pure and Sodium Chloride Doped Ice

**Thomas R. Styles** (W. H. Johnson, Advisor) Thesis Title: Holocene and Late Pleistocene Geology of Napoleon Hollow Archaeological Site in Lower Illinois River Valley

October 1984

**Sylvia M. Couto Dos Anjos** (A. V. Carozzi, Advisor) Thesis Title: Diagenetic Evolution of Marine Shales of the Campos Formation (Cretaceous/Tertiary), Campos Basin, Offshore Rio de Janeiro, SE Brazil

**Norma Vergo** (R. J. Kirkpatrick, Advisor) Thesis Title: Wallrock Alteration at the Bulldog Mountain Mine Creede, Mining District, Colorado

**Wang-Hong Yang** (R. J. Kirkpatrick, Advisor) Thesis Title: High-Resolution Silicon-29, Aluminum-27, and Sodium-23 Nuclear Magnetic Resonance Spectroscopic Study of Aluminum-Silicon Disordering in Annealed Albite and Oligoclase

January 1985

**Deborah I. Casavant** (W. H. Johnson, Advisor) Thesis Title: Sedimentation History and Sedimentary Environment of Upper Mississippi River Pool 19

**Peter K. Matthews** (A.S. Nieto, Advisor)

**Robert C. Vaiden** (R. L. Langenheim, Advisor) Thesis Title: Biostratigraphy and Paleoenvironment of Morrowan (Zone 20) Brachiopoda, Bird Spring Group, Arrow Canyon, Clark County, Nevada

#### **Doctoral Degrees Granted 1983-85**

October 1983

**Duane G. Horton** (J. Hower, Advisor) Thesis Title: Argillic Alteration Associated with the Amethyst Vein System, Creede Mining District, Colorado

January 1984

**Renato T. Bertani** (A. V. Carozzi, Advisor) Thesis Title: Microfacies, Depositional Models and Diagenesis of Lagoa Feia Formation (Lower Cretaceous), Campos Basin, Offshore Brazil

**Breno Wolff** (A. V. Carozzi, Advisor) Thesis Title: Microfacies, Depositional Environments, and Diagenesis of the Amapa Carbonates (Paleocene-Middle Miocene), Foz do Amazonas Basin, Offshore NE Brazil

May 1984

**William C. Dawson** (A. V. Carozzi, Advisor) Thesis Title: Petrography, Sedimentology, Diagenesis, and Reservoir Characteristics of Some Pennsylvanian Phylloid Algal Limestones: Kansas and Utah, U.S.A.

**Ibrahima Diaby** (A. V. Carozzi, Advisor) Thesis Title: Petrography, Diagenesis and Depositional Models of the St. Louis Limestone, Valmeyeran (Middle Mississippian), Illinois Basin, U.S.A.

**Michael R. Owen** (A. V. Carozzi, Advisor) Thesis Title: Sedimentary Petrology and Provenance of the Upper Jackfork Sandstone (Morrowan), Ouachita Mountains, Arkansas, U.S.A.

**Edward M. Snyder** (D. B. Blake, Advisor) Thesis Title: Taxonomy, Functional Morphology and Paleoecology of the Fenestellidae and Polyporiidae (Fenestelloidea, Bryozoa) of the Warsaw Formation (Valmeyeran, Mississippian) of the Mississippi Valley

October 1984

**Iham Demir** (D. L. Graf, Advisor) Thesis Title: Electrokinetic and Chemical Aspects of Transport of Chloride Brines Through Compacted Smectite Layers at Elevated Pressures

**Yong Il Lee** (G. deV. Klein, Advisor) Thesis Title: Petrology and Diagenesis of Medium-Grained Clastic Sediments in the Back-Arc Basins of the Western Pacific Ocean

January 1985

**Craig M. Bethke** (R. J. Kirkpatrick, Advisor) Thesis Title: Compaction-Driven Groundwater Flow and Heat Transfer in Intracratonic Sedimentary Basins and Genesis of the Upper Mississippi Valley Mineral District

**Virginia A. Colten** (D. L. Graf, Advisor) Thesis Title: Experimental Determination of Smectite Hydration States Under Diagenetic Conditions



MS Candidates being Recognized at 1985 Spring Banquet  
L/R: David McEachran, David Moffet, Phil Kwiecinski, Laura Smith  
Jan Reichelderfer, John Tabor and Lisbeth Cahill

## Notes From Our Emeritus Faculty

**CARLETON A. CHAPMAN** - Carlton and Thelma Chapman still live at Delmont Village, a 60-unit condominium complex in south Urbana. For the past three years Carleton has been busily engaged with duties as a member of the Delmont Board of Managers.

The Chapmans spend most of their time in Urbana but make frequent trips to Chicago to visit their son, John, and granddaughter, Erica. An occasional trip is made to Texas to visit relatives. Since retirement they have continued to make their annual summer trips to New England, spending most of their time in and around Acadia National Park on the Maine coast. Here, Carleton has gradually devoted less and less time to field work and more and more time to vacation.

In September '84 Carleton's office was changed, the fifth time since coming to Illinois in 1937. In reference to this he says, "If you plan to visit me, look in Room 113B N.H.B. My newly and attractively decorated office is light, quiet and spacious, particularly now that I have disposed of my personal geology library. This working space is deeply appreciated. Its assignment to my use is a marked indication of kindness and consideration on the part of the Department. It gives me, as a retiree, the pleasant feeling of still belonging to an active and thriving organization."

**RALPH E. GRIM** - "Fran and I spent this winter at our condominium in Florida. In February we flew to South Africa to visit some friends and for me to do some geologic work. One of my friends operates an andalusite mine in the northern Transvaal, and I spent some time studying the occurrence of the mineral. I also spent some time in Zululana in Natal Province evaluating a kaolin clay prospect.

In the four weeks we spent in South Africa we saw no evidence of the racial turmoil. Our friends continually spoke of the racial problem. They are deeply concerned because they see no solution. They are not about to turn over the country to the Black people.

We returned to Urbana in early April and I am continuing my long time study of variations in the kaolin deposits of Georgia and their origin."

**HAROLD W. SCOTT** - The Scotts celebrated their fifty-fifth wedding anniversary in June, 1984. Our entire family was present, including seven grandchildren and an eleven year old greatgranddaughter. We graduated in the morning of June 12, 1929 and were married in the afternoon. Joann was a music major and still maintains an avid interest in musical affairs, especially anything dealing with opera or Chopin. Our primary reason for spending the winter in Sarasota, Fla. is the splendid theater season available in that community.

In the last two years our travels have been limited because I've been busy writing. We published in March of '84 "Memorable Americans, 1750-1950". This was a joint work with Professor John Flanagan and Professor Robert Downs. We were asked to prepare a second volume and it was published March of '85. Since I handled all scientists and explorers I was able to include some geologists and petroleum men. Also, during the year I prepared a manuscript on "Chronicles of a Petroleum Geologist". Arrangements for publication are in process. It may be sponsored by the University of Illinois Foundation and the Department.

I gave a lecture in Sarasota this winter to the Friends of the Arts and Sciences. It was like old-home week because in the audience sat Carl Neer, graduate from the Department and an Illinois Oil Operator. Also, Jeanette Chumley Zimmerly and Phillip Zimmerly were present and were in my lecture class in 228 Nat. History in 1941. Also, Frank Dewolf and wife Dotty Tuttle and John DeWolf and wife Jean Bull were present. Dean Louis Howard (College of Agr.) and wife Mae were in attendance. It was like an Illini reunion.

Greetings to a wonderful group of Departmental Illini. I remember you all with admiration.



Ralph and Fran Grim at party held in honor  
of Dr. Grim's Honorary Doctorate at the University of Illinois  
May 1984



# ALUMNI GATHERINGS AT NATIONAL MEETINGS

Each year for some time now, the Department has sponsored an Alumni get together at both AAPG and GSA National Meetings. We reserve a private room for our gathering and hold it at the same time as the general alumni gatherings. Be sure to watch for information regarding the time and place for our get together each year. See you in Orlando and Atlanta in 85/86.

## **AAPG in San Antonio - 1984**

We asked Ralph Langenheim to keep his ears open at our Alumni party in San Antonio and let us know what he found out. He came back with lots of information which was enough to write the whole newsletter on his own--but we made him condense it. People seen at the cocktail party were **F. M. Wahl, Craig Bethke, Norb Cygan, Thomas L. Chamberlin, Jack R. Century, James C. Bloom, Chuck Hoke, Dave Heidlauf, Nahum Schneidermann, Yee-Ping Chia, Wm. Metzger, Wayne E. Moore, John Kiefer, Charles Norris, Frank Falkenheim, Jim Baxter, Dave Stevenson, Joe Boudreaux, Betty J. Evans, Jack Burgess, Harold Wanless, Jr. Virgil Kennedy, John C. Steinmetz, Tricia Santogrossi, Richard Lahann, Mike Kirby, David Lumsden, Murray Gerber, G. deV. Klein and Chung, Martin Deuth, Bill Stallworth, Dewitt Clinton Van Siclen, Albert and Marguerite Carozzi, Charles Summerson, Sherwood and Cindy Wise, Dan and Shirley Brennan** (people who were in Ray Gutschicks first class at Notre Dame), **Floyd Allen Lindberg, Robert and Suzanne Cluff** (Gavlin), **Lyle McGinnis, Richard Smosna, Charles W. Spencer, Rock Blank, Skip Davis, Dag Nummedal** (Ph.D. in Geography, thesis research with G. deV. Klein), **John B. Tubb**. Not all of these are our graduates, but all have association with the department one way or another. Others at party were missed by Ralph --sorry.

Some of the news picked up included: **Jack R. Century**, MS '52 - Independent Geologist in Calgary had memories of Hal Wanless at age four. **Yee-Ping Chia** Ph.D '80 - is now with ARCO. **John Kiefer** Ph.D. '70 is now assistant state geologist and head of the Oil and Gas Section of the Kentucky Geological Survey. **Charles Norris** BS '69 - is Emerald Gas and Oil. **Frank Falkenheim** PhD '81 gave a paper on the Brazilian Continental Margin in the AAPG Session International Petroleum Geology II--Brazil. **Joe Boudreaux** MS '67 - is still with Texaco. **Betty J. Evans** BS '78 - is with Getty. **Jack Burgess** BS '49 is with Gulf Oil Exploration. **Chuck Hoke** AB '37 is a consultant. **James C. Bloom** BS '60 is an independent. **Wayne E. Morre** '66 is at Central Michigan University. **William Metzger** PhD '61 is with Conoco. **Nahum Schneidermann** PhD '72 is with Gulf Oil and Production Co. **Harold Wanless** was accompanied by his wife Marge and infant son Ryan. **Virgil Kennedy** MS '48 is with Shell Oil Co. **John Steinmetz** MS '75 is with Marathon Research. **Tricia Santogrossi** MS '77 is still with Shell in Houston. **Richard Lahann** PhD '75 after four years of teaching and five years of research with Conoco in Poncan City is now going to London in operations after being transferred to Exploration. **Mike Kirby** BS '79 will soon move from Corpus Christi to Houston and is changing to Ensearch Exploration. **David Lumsden** PhD '65 has a three year old child. **Murray Gerber** BS '53 is with Shell. **Martin Deuth** MS '38 is teaching at Stephen F. Austin State University in Nacogdoches, TX -- is seventy years old and retired in August. **Bill Stallworth** BS '51 is with Gearhart Industries, Ft. Worth, TX. **Dewitt Clinton Van Siclin** MS '41 retired from Houston at end of 1980. Now teaches one course per semester and is consulting. **Woody Wise** PhD '70 co-chaired the session SEPM Shelf and Slope Processes and also gave a paper at the meetings. He also reports he now holds the record for the number of joints of drill pipe lost on the Glomar Challenger having dropped strings of pipe on two occasions. One loss amounted to 6000 meters of pipe. **Floyd Allan Lindberg** BS '79 is with Gulf Oil Co. in

Sugarland, TX., **Lyle McGinnis** PhD '65 is a faculty member at LSU. (**Robert Cluff** is consulting in Denver. Wife **Susanne (Gavelin)** was loosely associated with the department as a mathematics student who did a senior thesis with John Mann in mathematical geology. **Richard Sosna** is on the staff at the University of West Virginia. **Charles W. Spencer** MS '55 with USGS in Denver, was president elect (1983-84) of the Rocky Mountain section of the AAPG and president for 84-85. **Rick Blank** BS 71 is with Stratigraphic Services Co. of Seattle, WA and was tending their exhibit at the meeting. **Dag Nummedal** is a staff member of the Dept. of Geology at L.S.U. He co-chaired the SEPM Modern Sediments of the Gulf Coast Session and gave a paper in the session. **John B. Tubb's** PhD '63 son has just graduated from high school in Houston.

#### **AAPG in New Orleans - 1985**

We had a quiet lounge room available for us at the Hilton in New Orleans - the perfect setting for visiting and meeting fellow Illinois Alumni. Among those signing our guest book were: **W. O. Heap** '44, **R. M. Winar** '53 & '55, **J. D. Donithan** '59, **Lester W. Clutter** '48 & '51, **Ginger Clutter** '46 & 48, **Bob Cluff** '81, **Theresa Gierlowski** '83, **Jan L. Reichelderfer** '85, **Wallace W. Hagen, Wally & Marilou** ? '45 & '48, **William C. Dawson** '74 & '84, **C. Pius Weibel** '82, **John and Kathy Shepard** '80, **Robert O. Schrott** '54, **Gregory T. Spanski** '66, **David & Landy Lumsden** '65, **Daniel A. Textoris** '63, **Robert & Ann Strause Fox** '53, **Kathy Targos Hewell, Danita Brandt Velbel**, '77, **Bob Lamb**, '48, **Don Neeley** '80, **Mark and Kathleen Reinbold** '77, **Jack and Katy Threet** '51, **John D. Kiefer** '61, **Paul Schluger** '72, **Don Lane** '58, **Dennis Coleman** '76, **Bill Busch** '76, **Mary Brownlee Conner** '75, **Dave & Robyn Cook Schuster** '80, **Dick Castle** '67, **Dave & Toni Rich**, '79, **Wayne and Effie Moore** '41 & '42, **Mike & Marsha Bourque** '77, **Bob Mason** '72, **James H. Fisher** '47, '49, '53, **Morris & Jean Leighton** '47, **Richard Wassall** '75, **R. Michael & Virginia Lloyd** '53, **Eric Lipman** '82, and **Alan Lindberg** '79. Thanks to Richard Winar we were alerted to the fact that our reservations for the lounge had gone astray somehow. He stepped forward to make sure that a gathering was going to take place when it appeared we were not getting together.



L/R: Richard Winar '53 & '55, W. O. Heap '44 and David E. Anderson, Dept. Head were early arrivals at Alumni gathering at the Hilton in New Orleans, 1985

**SEE YOU IN ATLANTA IN 1986**

### GSA in Indianapolis - 1983

Our Alumni filled the room to overflowing at our cocktail party in Indianapolis. Three of our alumni have considerable responsibility at GSA presently. **Michael Wahl**, Ph.D. '58, is executive director. Mike replaced John Frye in 1982. The treasurer of the Society is **Robert Fuchs**, MS '52. Bob is in the oil business with headquarters in Denver and has been very active on the investment committee for GSA over the past several years and replaced Bill Heroy as treasurer in 1982. **Haydn H. Murray** was elected to the council of GSA in 1982 and is serving a three-year term. He was appointed by the president of the Society, Dr. Paul Bailly, to head up the budget committee for GSA, and as such, is a member of the executive committee of the council.. Our Alumni also shown in the awards category. **John Hawley** PhD '62, received the Kirk Bryan Award.



**John Hawley accepting Kirk Bryan Award at GSA - Indianapolis**

### GSA in Reno - 1984

Close to a hundred people attended the Alumni function. Dry snacks were provided and the room was large enough for people to move around and mix comfortably. **Norb Cygan** stopped by and provided information about several Alumni that were listed as lost in the last newsletter. Others attending included: **M.W. Leighton**, **E. Donald McKay**, **William W. Hay**, **Michael R. Owen**, **Keith Hackley**, **Jack C. L. Liu**, **Bill and Linda Size**, **Sue and Tom Buschbach**, **John D. Kiefer**, **Dennis Eberl**, **Symma and Mark Rich**, **David H. Griffing**, **Scott Carpenter**, **Steve Garbner**, **Ray and Sue Ferrell**, **Norman Sohl**, **Jim Cobb**, **Michael Sweet**, **Dottie and Mike Wahl**, **Jim Shea**, **Greta H. Emrich**, **Robert Dietz**, **Keros Cartwright**, **Richard W. Ely**, **Gerald and Marie Shideler**, **James B. Murowchich**, **James Palmer**, **Richard M. and Elisabeth Forester**, **Dennis Coleman**, **Robert Vaiden**, **Kathleen Marsaglia**, **Dan Lawson**, **Paul R. Seaber**, **Joe Rosensheim**, **Pat Bickford**, **Bob and June Farrola**, **John and Diane Hawley**, **Leah and Hal Glushoter**, **Jack E. Harrison**, **David Keefer**, **Richard R. Parizek**, **Arthur Zeizel**, **Rich Kimmel**, **Dave McGeary**, **L. T. Larson**, **Jack Sharp**, **Richard F. McCarney**, **Allen and Frances Agnew**, **Stuart Roptaizer**, **Meg Saunders**, **William A. Oliver, Jr.**, **George H. Davis**, **I. Edgar Odon**, **Bernard Lindsey, Jr.**, **Louis Bergeron**, **R. J. Reeder**, **Brian J. Cardott**, **Michael Vaughan**, **Jane C. Maxey**, **James E. Roche**, **Steve Guggenheim**, **Paul Holm**, **Tom Guensburg**, **Grant Redmon**, **Paul P. Orkild**, **Leah Rogers** and **Dick Winar**. Others were in attendance but we missed getting them to sign our guest book, or couldn't make out the signatures of a few that did.

**SEE YOU IN ORLANDO IN 1985**



# PEOPLE WE HEARD FROM

**Editors Note:** The following bits and pieces of information have been put together from responses to our Alumni Questionnaire, letters, and cards to David Anderson, Dan Blake, Don Henderson, Ralph Langenheim, George White, and word of mouth communication at various meetings. (See also Ralph's 1984 AAPG Report). Letters I have received indicate this is your favorite section of the Newsletter. Remember without your responses it can't be done. A questionnaire is provided at the back of the Newsletter to help you keep us informed of what is happening in your life.

**Agnew, Allen F.** (Courtesy Prof. of Geology, Oregon St. Univ. AB, '40, MS, '42, PhD-Stanford, '49) - "I don't remember when last I responded, so at the risk of repeating an item or two, here are the last two years: Dec. 15, 1981, Retired from Library of Congress (20 years Federal) - Spring Semester 1982, Visiting Prof. of Geol., Univ. Texas/Austin (Grad. Seminar in Geology & Public Policy; Geology for Engineers). - Attended Assoc. Amer. State Geologists (Hershey, PA) Ann. Mtg., 6/82 - Fall Quarter, 1982 Taught Hydrogeology at Ore. State University. Attended AASG (Anchorage, AK) Ann. Mtg. 6/83. Summer 1983 Purchased R-V/Camper; several trips in Oregon convinced Fran that it was a good idea. Fall Quarter, 1983 Teaching Engineering Geology at O.S.U." Attended GSA Illinois Alumni Cocktail Party in Indianapolis and Reno (83 & 84). Fall 1984 was the recipient of the Amer. Inst. of Prof. Geologists Public Service Award--to recognize "outstanding contributions to the public good." Also served on the 1984 Ad Hoc Comm. on Hydrogeologist Certification.

**Ames, John A.** MS, '50 - John wrote to tell us we really goofed. 1982-83 Alumni Notes put someone else's information (we know not who) under his name. To get it straight, John is a consultant in Geology & Mineral Resources in Pittsburgh, PA.

**Andrews, Franklin** BS, '55 - Via a telephone conversation from Norbert Cygan to Pat Lane, we learned that Frank is consulting in Engineering Geology in Tallahassee, FL.

**Ausich, William** BS, '74, PhD Indiana '78 - In a letter to Dan Blake, Bill reports that he left Wright State Univ. to become an Assoc. Prof. of Paleobiology at Ohio State University in August of 1984.

**Back, William** AB, '48 - In the summer of '83, he and his wife visited some hydrogeological sites on the northern foot of Caucasus in the Soviet Union, at the Black Sea coast and in Armenia. Also attended the Geological Congress in Moscow. He was co-editor of the DNAG Hydrogeology Volume.

**Baldwin, Debbie** - Debbie visited Urbana and left a note to RLL. She is doing "some geology-hydrology for the EPA at a hazardous waste site in Indiana" - She didn't leave her address though so she is still on our Lost List.

**Ballman, Donald L.** BS '55; MS '56; PhD '59 - Via a letter to the Whites, we learned that on August 1st, Don was named "Manager for Surface Testing in the Site Characterization Project Office in the Office of Nuclear Waste Isolation at Battelle. He's responsible for all surface-based investigations necessary to characterize whichever salt site is selected by President Reagan to be investigated for suitability as the first nuclear waste repository. "For fiscal '85, we will primarily be preparing a Surface Characterization Test Plan and Activity Plans & Procedures to carry it out...Of the three sites that will be characterized, one will be selected in 1990 for construction of the first repository which is to begin accepting nuclear spent fuel in 1998. This is the biggest challenge of my career. The drilling program minimally will consist of five deep aquifer hydro nests, five shallow aquifer nests, three stratigraphic bore holes, six shaft monitoring boreholes, 450 foundation borings for surface facilities. A most comprehensive program of environmental and socio-economic investigations will also be performed."



**Bishop, Robert E.** BS '54; MS '59 - Via a phone call to Pat Lane from N. Cygan, we learned that Robert is President of Rebco Inc. (Oil exploration and development) in Denver, Colorado.

**Boardman, Richard S.** BS '48; MS '52; PhD '55 - Dan Blake got a chance to talk with Richard Boardman who is still in Bethesda, MD.

**Braumiller, Allen S.** MS '57 - Allen is Vice President (Exploration) of Helmerich & Payne, Inc., Tulsa, OK.

**Brooks, Robert A.** BS '66 - Robert is Vice President of Exploration for Energy Research Group in Wichita, KS.

**Broun, Alex S.** BS '55 - Alex is a Petroleum Scientist with Exxon Co. USA on the staff of the Chief Geologist. He's been with Exxon as a Geologist since leaving graduate school at Florida State University in 1956 and has had numerous assignments around the world in Petroleum Exploration. His last assignment, prior to Houston, was as Chief Geologist for Esso Resources Canada Ltd. in Calgary.

**Brouwers (Forester) Elisabeth** BS '72; MS '77 - "Did a volunteer stint for USGS in 1976-77, at U.I. National Museum, Washington D.C. while husband (**Richard M. Forester**, MS '72; PhD '75) had National Research Council Post-Doc. -- Began work toward PhD at Univ. of Colo. (with D.L. Eicher, E.G. Kauffman) in 1979; anticipated completion June - December 1984. -- Have worked for USGS in Denver since 1978. Presently working on upper cretaceous Quaternary ostracode faunas from the Pacific Basin, particularly sediments from Northern Alaska (onshore & offshore), Alaska Peninsula, offshore Gulf of Alaska, and central and southern California; some minor work on western interior. Primarily basic research, with short- and long-term applications in biostratigraphy, tectonics, paleoecology, taxonomy, bioigraphy."

**Burgess, Steven** BS '82/Math/Comp. Sci. '83 - "This is my first response to a Newsletter information request. After being a T.A. at Field Camp last summer, I started at Cornell as a graduate student working with the COCORP project. I am working on data collected in the Basin and Range province, East - Central Nevada. On Oct. 16, 1983, married Vicki Benson, also an Illinois graduate (BS-LAS-EEE, '81; BS Geol. '83). Vicki is presently employed by Cornell Univ. in the Dept. of Public Affairs."

**Busch, Phillip M.** BS '48; MS '49; PhD '53 - Dr. Busch retired on Jan. 9th, 1982. Most of his work experience was with the Federal Government in emergency preparedness activities except for short periods of time when he was a University Professor at St. Lawrence Univ., Canton, NY, geologist with the Ill. St. Geol. Survey, Urbana, Illinois, and while in the military. He's the author of many publications and is a member of the Amer. Assoc. for the Advancement of Science and is included in "American Men and Women of Science" and "Personalities of the South." Although Dr. Busch is retired, he is a National Defense Executive Reservist in the U.S. Dept. of the Interior's Emergency Minerals Administration subject to recall in the event of a national emergency.

**Buschback, Thomas C.** BS '50; MS '51; PhD '59 - Tom is a Research Professor of Geology at St. Louis University. He retired from the Illinois Geological Survey in 1978. He's been the Coordinator of New Madrid Seismotectonic Study for the U.S. Nuclear Regulatory Commission since 1976.

**Bushman, Edwin F.** BS '41 - A Christmas letter to the Dept. tells us that Ed works in Southern California in plastics and spent his spare time in '83 writing, photographing, and editing an anniversary yearbook for the Society of Plastics Engineers. He does some consulting and grows oranges. He and Louise have six children, all grown and on their way.

**Cardott, Brian J.** BS '77 - He and his wife, Kathy Rieck ('78) Cardott had a son, Evan Joseph, on Nov. 27, 1984, in Norman, Oklahoma. They also have a three-year-old daughter, Lauren. Brian is a geologist for the Oklahoma Geological Survey in Norman.

**Cartwright, Keros** PhD '73 - Keros was the Co-Chairman & State Agency Representative of the Committee on Hydrostratigraphic Units at the GSA and has recently been appointed as an Adjunct Professor in the U of I Geology Department. He is the head of the General and Environmental Geology Group at the Illinois State Geological Survey in Champaign.

**Chamberlin, Thomas L.** MS '71; PhD '75 - Via a letter sent to Ralph Langenheim, Tom has been giving lectures on geology and theology to the Sunday School of his church and is still working for Petroleum, Inc. in Denver, CO. Tom, Susan, Scott and Philip all attended the 1984 AAPG in San Antonio.

**Chicoine, Stephen** BS '72; MS Pet. Engr./Bus '75 (Stanford) - Stephen writes that he is Texas Exploration Manager for Entex Petroleum, the oil and gas subsidiary of the Gulf Coast's gas distribution utility.

**Christiansen, Earl A.** PhD '59 - Via a note to the Whites, we learned that Earl's been doing consulting work connected with irrigation and canal seepage in John Scott's thesis area, soil salinity projects in numerous parts of the province, and landslide studies with Karl Sauer, Dept. of Civil Engineering. Karl and he won the Thomas Roy Award for their paper on the Denholm landslide which was chosen as the most outstanding paper published in Canada on engineering geology in 1983. He reported taking a three-week trip to Maxatlan and Puertoa Vallarta, Mexico.

**Christy, Rober B.** MS '58 - One of our alumni that was listed as lost in our 82-83 newsletter was found working for Chevron USA Inc. in Denver as a division development geologist.

**Clutter, Lester W.** BS '48; MS '51 - Lester and his wife attended a class reunion on campus Sept. 30, 1983 and stopped by to visit the dept. for a little while to reminisce about old friends and teachers. Lester is Senior Geological Consultant with MAPCO Production Company in Tulsa, OK.

**Cobb, James C.** BS '71; MS(Eastern Kentucky); PhD '81 - Jim has been with the Kentucky Geological Survey since 1980 and became head of the Coal Section in 1981. He teaches coal geology at Eastern Kentucky University and the University of Kentucky, directing theses and conducting coal research at the Survey. Linda and Jim adopted a daughter from South Korea in March of 83 and named her Sarah.

**Coogan, Alan** PhD '62 - The following is an excerpt from a Christmas letter to the Whites from Alan and Sylvia: "...we are still at Kent State and I am still professing geology. It has gotten so bad that even an unreconstructed paleontologist is now using word processing equipment at work and at home. Thank heavens that we have some of the younger ones to get us started."

**Cygan, Norbert E.** BS '54; MS '56; PhD '62 - Via a phone call to Pat on 1/30/85 we learned that Norbert is conducting seminars for Chevron Corp. During 1984, he was in Sudan and China for Chevron and teamed up with Al Scott (PhD '58) and Dan Textoris (PhD '62) to conduct a seminar in Santa Barbara, CA. Because Norb travels so much and actively seeks our Illinois alums, he has helped the editor enormously in updating our information.

**Davis, George H.** BS '42 - George served as Chairman of the Hydrogeology Division of the GSA in 1984 and attended out Alumni gathering in Reno.

**Decker, Willis M.** BS '39 - "I retired from Cities Service Oil Co. August 1, 1978 after 39 years. The past 5 years I served as Vice President - Exploration for Jet Oil Company - We drilled between 35 to 45 wells a year in Oklahoma and Texas. I retired from Jet Oil Company August 1, 1983, followed by 'a six week trip to England, Scotland and parts of Europe.' The future holds Geological consulting and travel."

**Deere, Don U.** (former Prof. Eng. Geol. in our dept.) - According to a Christmas card to the Whites, Don has been doing a lot of traveling --to Rio de Janeiro, Buenos Aires, Kenya, and the Aswan Dam in Egypt. He and his wife, Carmen, spent two weeks in Beijing, China as well.

**Dolly, Edward D.** BS '63 (MS & PHD Univ. of Oklahoma - Norman) - Ed is an independent geologist in oil and gas exploration concentrating on U.S. Exploration.

**Doyle, Frank Lawrence** PhD '58 - Frank is serving as the Secretary-Treasurer of the International Association of Hydrogeologists.

**Dunham, Sir Kingsley F.R.S.** (First U of I George Miller Professor) - Via a letter to the Whites in Jan. '85, we learned that Sir Kingsley's eyesight is failing, however he has nearly completed a life's work in Vol. II of Geology of the Northern Pennine Orefield which is expected to appear in early 85 and a revised second edition of Vol. I (first published in 1948) is almost ready. "We are celebrating my 3/4 century with two parties and, in April, a symposium organized by two of my keenest students, leading, they hope to a Festschrift."

**Emrich, Grover H.** PhD '62 - Grover served as First Vice-Chairman of the 1984 Management Board -- Hydrogeology Division - GSA.

**Fisher, James H.** AB '43; MS '49; PhD '53 - "I will be retiring from Michigan State University (Prof. of Petroleum Geology) on Sept. 1, 1984 after 27 years of service. We will be staying in Michigan for 2 or 3 years while I establish an independent oil company, concentrating on Michigan prospects. I have just completed the manuscript of the geology of the Michigan Basin for the GSA Decade of North American Geology Publication scheduled for 1985.

**Fuchs, Robert L.** MS '52 - President, Geosystems Corp. - a natural resources investment company. "I have been treasurer of the GSA since 1982. Prior to that I was a Trustee and Vice Chairman of the GSA foundation. Also, served as President of the Energy Minerals Division of the AAPG for the '81-'82 year."

**Ginsburg, Robert Nathan** BS '48 - Robert, an AAPG Distinguished Lecturer, has been chosen by SEPM to receive the Twenhofel Medal for "outstanding contributions to sedimentary geology." Presentation of SEPM's highest award was made at their Awards Dinner March 25th during AAPG's annual meeting in New Orleans. Ginsburg is a past president and honorary member of SEPM. It was under his leadership that the society initiated its research group program, which has grown to include 16 groups. A graduate of the University of Illinois and the University of Chicago, Ginsburg is now associated with the Rosentiel School of Marine and Atmospheric Science, University of Miami at Fisher Island, FL. in the comparative sedimentology laboratory of the School's Division of Marine Geology and Geophysics. He is a fellow of the American Assoc. for the Advancement of Science and of the GSA; vice president of the International Assoc. of Sedimentologists; a member of the Florida Academy of Science; and a past committee chairman for the International Symposium of Coral Reefs.

**Ginzel, Marvin G.** BS '71 (MS NIU) "-Spent 10 years with Gulf Oil in Wyoming, Houston, Midland Texas, London, Norway, and New Orleans - Now employed by Houston Natural Gas as Chief Geophysicist/Mgr. of Geophysics of HNG Oil Company headquartered in Midland Texas with offices in Denver, Houston, Corpus Christie and Tyler TX.

**Goldman, Charles R.** AB '52; MS '55 - "Professor, Division of Environmental Studies, University of California, Davis. Teaching courses in Limnology, Selected Ecosystems, and Environmental Studies at the University of California, Davis. Research continues on lakes, especially Lake Tahoe and Castle Lake in northern California. Extensive consultation on tropical reservoirs in Africa, South and Central America, and New Guinea. Also, administrative duties and directorship of the Tahoe Research Group. Recently published a textbook (Limnology, McGraw-Hill) and a symposium volume (Freshwater Crayfish V, AVI Publishers) in addition to two previous books and 225 other publications."

**Granath, James W.** BS '71 MS '73 - Senior Research Geologist for Conoco Exploration Research in Ponca City, OK.

**Hansen, Michael W.** PhD '75 - Via a letter to Ralph Langenheim from Tom Chamberlin, we learned that Mike is now working for Ensearch Energy.

**Harp, Susan** BS '84 - As of August 84, Susan reports that she received a Research



Assistantship from the Department of Environmental Engineering at Purdue University. She's finding that graduate school is lots of work.

**Hawley, John W.** PhD '62 - John is with the New Mexico Bureau of Mines and Mineral Resources in Socorro, NM and received the Kirk Bryan Award along with Lee Gile and Bob Grossman (both pedologists). This award is presented annually to the author or authors of an outstanding published contribution in the field of geomorphology and Quaternary studies. The work must have been published in the past five years. These men received this award for their 1981 publication: Soils and Geomorphology of a Basin and Range Area of Southern New Mexico. Guidebook to the Desert Project (New Mexico Bureau of Mines and Mineral Resources Memoir 39). John says his greatest personal challenge was learning to relate his work to an audience of nongeologists, including soil scientists, biologists, agronomists, hydrologists, archeologists, and even land-use planners.

**Henton, John Melvin, Jr.** BS '48; MS '49 - John is retiring from Chevron in early '85 after 35+ years.

**Hines, Michael A.** BS '83 - Mike graduated from the U.S. Army engineer officer basic course at Fort Belvoir, VA. During the course, newly commissioned Corps of Engineers officers were taught management principles and were familiarized with the weaponry and equipment used in their future duties as platoon leaders. Mike is a Second Lt.

**Hodgson, Philip R.** BS '82 (MS '84 Purdue) - Philip completed his Master's thesis at Purdue University, West Lafayette, IN in the fall of 1984. His area of interest was the acquisition and processing of shallow seismic reflection data. He began working at Mobil Oil in Dallas, Texas in October of 1984 as a geophysicist.

**Holmin, Lorrie** AB '46; MA '49 (PhD '73 Univ. of Uppsala, Sweden) - "In 1973, I took my PhD (Fil. dr) exam at the University of Uppsala, Sweden but not in geology, which was my undergraduate minor at U of I. I was the first person in Sweden to take it in the then newly established "American Literature Line" though of course many persons had written theses on American writers before that. I think that my thesis was the first anywhere on Lillian Hellman - followed by many. I work as a translator and manuscript-polisher at the Department of Educational Research of the Stockholm Institute of Education (which is the University of Teacher-training). Translate pedagogic theory! Have a son Robert, who has a BA in musicology but has decided to become an opera singer!!! My geologic work is limited to a stone-cutting course to which I have just applied! And to endless rock-hounding (especially on Mediterranean islands).

**Houck, Karen** - I'm working on fossil corals from the ~~Orin~~<sup>Orin</sup>inturn in Pennsylvanian of Colorado.

**Jamrisko, Steven F.** BS '71 - Steve Jamrisko is now in London with the U.S. Navy on Staff Com. in CL. V.S. Naval Force Europe as Petroleum Logistics Officer. Enjoys job and is safe from sea duty for a while.

**Kaelin, Roy A., Jr.** BS '78 - May 84 MS in Business Administration with emphasis in logistics. Research Geologist at Iowa State Mining and Mineral Resources Research Institute (ISMMRRI); I oversee daily operations of ISMMRRI which educates and trains graduate students in mining and mineral-related disciplines. - August 1983 to present: Proprietor of The Drawing Room, a custom art establishment (my own business) specializing in logo design, personal portraits, and American commemorative art. - June 1980 to present: Research Geologist, ISMMRRI, Iowa State University, Ames. - June 1980 to present: Program Assistant, Fossil Energy Program, Ames Laboratory (U.S. Department of Energy facility located at Iowa State University. - August 1979 to June 1980; Technical Advisor, Illinois Energy Resources Commission, Springfield, IL; I served as technical liaison between the Illinois General Assembly and Southern Illinois University, Carbondale. - June 1978 to August 1979: Assistant Geologist, Geographics Corp., Urbana. I prepared coal and lignite resource maps



and operated digital planimetry system. I also shared editing of computer software.

**Karrow, Paul** PhD '57 - From a Christmas card to the Whites, we learned that Paul was spending his sabbatical in Florida working on Pleistocene terraces with a break in mid-May to run a special session on Great Lakes History at the Geological Assoc. of Canada meeting in London, Ontario. He is also writing half a chapter on the Great Lakes area for the Quaternary of Canada for GSC.

**Kay, (Mahlburg) Suzanne** BS '69; MS '72 - Suzanne attended GSA in Indianapolis and touched base with a lot of Illini friends. A trip to Argentina was in the plans for Spring of 84. (From Christmas card to DEA).

**Kesling, Robert Vernon** MS '41; PhD '49 - Via a letter to the Whites, we learned that Bob retired in '84. There was a large dinner held in his honor. They left for a trip to California and Alaska to visit with the children and grandchildren.

**Kull, David J.** BS '48 - "Petroleum Advisor to Fortin Enterprises; recommending participation in drilling ventures; approving farmouts and farmins; overseeing production operations by other operators in wells and fields where Fortin owns working interests; in short: managing leasing, exploration, drilling and production for a small oil company."

**Kuo, Lung-Chuan** MS '80; PhD '83 - Lung-Chuan is a research geologist in the Exploration Research Division of Conoco, Inc. He is establishing an experimental program for solving petrologic/geochemical problems in carbonate diagenesis (origin of carbonate cements, formation and evolution of fluid inclusions in carbonate crystals, etc). During Jan 1983 and May 1984 Lung-Chuan held a postdoc fellowship in the Department of Geological Sciences, University of Michigan. His major duties were: (1) set up a hydrothermal laboratory, (2) study hydrothermal reactions between the candidate backfill materials for high level waste isolation and the groundwater at the proposed repository. In addition, he had lots of fun studying the petrology of a spinel harzburgite xenolith from one of the Tertiary basalt plateaus in western Saudi Arabia, and the origin of immiscible silicate glasses in a tholeiitic basalt from Columbia River Plateau, Washington.

**Lacy, Wellard C.** MS '40 (PhD, Harvard) - "Retired from active teaching at James Cook University, Townsville, Qld., Australia in 1982. Engaged in consulting work, and have presented courses in Management Training for Geologists" for the Australian Mineral Foundation in Australia, for the University of Witwatersrand in Johannesburg, S. Africa, and for the Geological Society of Zimbabwe in Harare. Technical advisor for the TV documentary, a seven hour series on the relation of metals to man's social development, "Out of the Fiery Furnace", and editor of two volumes of the Benchmark Series, "Exploration Geology and Mineral Exploration."

**Lukert, Michael T.** BS '60 (MS Northern Ill. '62; PhD Case Western Reserves '73) - Michael is a Professor in the Dept. of Geosciences, Edinboro Univ. of PA, in Edinboro, and writes "Nothing much new."

**Mansholt, M. Scott** BS '82; (MS, Southern Ill. Univ. '84) - Scott is a geologist for the ARCO Oil & Gas Company, Houston Onshore Petroleum Exploration.

**Miller, James D.** BS '78 - "I have been pursuing a PhD at the Univ. of Minnesota in Minneapolis since leaving the U of I. My research deals with the petrology of Anorthositic rocks in the Duluth Complex in NE Minnesota. From 1979-1982, I worked part-time and summers with Phillips Petroleum in the Upper Great Lakes Region and Central Alaska as an Exploration Geologist. I am presently working with the Minn. Geol. Survey on several projects dealing with the Geology and Geochemistry of precambrian rocks. I expect to continue working with the MGS after completion of my degree early in 1984."

**Mitchler, John Drew** BS '78 - "Since my graduation, I have been employed with area consulting firms specializing in oil, gas, coal and barite production. Most of my work has been in the Illinois Basin, however, several jobs have taken me to New Mexico, Nevada, Utah, Louisiana, and Eastern Kentucky. My employment included two years of service at William H. Smith & Assoc. (where it seems I worked with an entire graduating class of geologists) and 3 years of service at Woodward-

Clyde Consultants (where I was directly involved with the discovery of two Illinois oil fields). Currently I have my own consulting office here in Champaign where I evaluate oil and gas prospects and greet visiting geologists.

**Moore, David W.** MS '72; PhD '81 - David works as a Geologist for the USGS in Denver, CO.

**Motts, Ward** PhD '57 - Via a Christmas letter to the Whites, we learned that Ward gave a talk on artificial recharge at a hydrogeology conference in Orlando, Florida. His wife, Dona, has been appointed by the Massachusetts LWV and State Secretary of Environmental Affairs to the Water Supply Citizens Advisory Committee (WSCAL) to review reports on State water needs and alternatives to diversion of the Connecticut River.

**Muller, Ernest H.** MS '49; PhD '52 - In a Christmas letter to the Whites, we learned that Ernest's wife Wanda has recovered from a serious automobile accident. They spent the summer of 84 traveling in Austria, Germany, and the British Isles. Ernest is a long-time Prof. of Geomorphology at Syracuse University in New York.

**Murray, Haydn** BS '48; MS '50; PhD '51 - Haydn is a Professor in the Dept. of Geology at Indiana University, Bloomington. We have seen Haydn's name in GSA news announcing his term as Councilor 1982-1984 as well as seeing him at the Indianapolis GSA meeting.

**Nicholson, Toni Jost** BS '79; (MS '83 Univ. of KY) - "After my graduation from the U of I, I attended graduate school, and worked for D.L. Lobb & Associates, Inc., a small engineering and geologic consulting firm in Lexington, Kentucky. I was married to Bill Nicholson in September 1981, and receive my MS in Geology from the University of Kentucky in December 1983. My thesis dealt with several petroliferous Paleozoic units in southeastern Kentucky. Since May of 1984, I have been employed by the U.S. Army Corps of Engineers, Savannah District."

**Norris, Charles H.** BS '69 - Via a letter to Ralph Langenheim from Tom Chamberlin, we discovered that Chuck has his own company--Emerald Gas and Oil. He also ran as a write-in candidate for representative (state or U.S., unstated) from his district.

**Nowak, Frank J.** MS '70; PhD '72 - Via a letter to Ralph Langenheim from Tom Chamberlin, we learned that Frank is now working as chief geologist (?) for Total in Denver, Colorado.

**O'Brien, Neal R.** MS '61; PhD '63 - "Joined S.U.N.Y. - Potsdam in 1963, became chairman in 1970 and re-elected for terms since then. Research mainly in clay sedimentology - use SEM to study clay fabric. Selected for Chancellor's Award for Excellence in teaching and S.U.N.Y. Faculty Scholar." From RLL, we learned that Neal & Kathy have a new daughter named Becky, and Neal is busy with a new research grant and some consulting along with his academic duties at S.U.N.Y.

**Orr, R. William** BS '62; (MA '64, Univ. of TX) (PhD '67, Indiana Univ.) "Geology became a separate department at Ball State in 1981 when the Department of Geography and Geology split. I have served as Department Chairman since that time. We have a faculty of six with approximately one hundred undergraduate majors. The summer field course consistently numbers more than sixty students. Since its inception in the mid 1960's, seventy-five schools from thirty-one states have been represented by students. A couple of years ago we ran into Ralph Langenheim and the Illinois field camp group at Yellowstone."

**Papish, Judy** BS '81 - "To bring you up to date, for the past year and a half (or so), I have been working as a seismic data analyst with Petty-Ray Geophysical. It has been a truly significant challenge trying to stay in touch with geology now that so much time is taken up with business procedures. I have managed to learn quite a bit about computers and the oil and gas business so my education hasn't stopped, just taken a new course. Right now, I'm planning on taking some courses at the Univ. of Colorado - Denver in the spring in geology and computer programming."

Judy attended the 1985 Spring Banquet and visited with friends still in the department.

**Parizek, Richard R.** MS '60; PhD '61 - Richard served on the 1984 Birdsall Lecturer Committee and on the O.E. Meinzer Award Panel for the GSA meeting.

**Patterson, Sam H.** PhD '55 - Sam is a geologist in the USGS Office of Mineral Resources, Reston, Virginia and was one of eight USGS employees to receive a Distinguished Service Award, the Department of the Interior's highest award. He is one of the world's leading experts on clay and aluminum resources and has conducted extensive studies on the geology, mineralogy and resources of these substances. His award citation recognizes his "many achievements in the investigations of mineral deposits and domestic and world resources of aluminum."

**Patton, Howard L.** BS '46; MS '48 - Geologist at Chevron USA in Denver.

**Perkins, Thomas W.** BS '72 - Tom and Maxine have returned to Bakersfield, CA from Australia (per RLL).

**Pride, Douglas E.** PhD '69 - Doug reported to RLL that he was busy consulting in Arizona & Nevada and advising in Colorado during 1983 as well as holding the fort at Ohio State.

**Quirke, Terence T., Jr.** BS '51 - After 15 years as an exploration geologist in Canada, he was transferred by INCO Ltd. first to Milwaukee in 1975, then to Denver in 1979. With others he began a major exploration program by the American Copper & Nickel Co. His wife, Ruth, designed a home for them in the mountains west of Denver in which they've lived since May 1981. Terry is currently Senior Staff Geologist, Exploration Services, concerned mainly with computer applications in mineral exploration.

**Rall, Elizabeth Pretzer** PhD '56 and **Rall, Raymond W.** BS '50 MS '51 - "Ray is prospecting in Nevada for Tenneco. Betty is prospecting in Wyoming in the Powder Basin Minnelusa. We have been in Colorado for 1.5 years and are quite happy here."

**Reinbold, Mark** MS '77 - Mark was setting a well in the Weillsiton Basin at -15° in Nov. 83 - toured New England in October (per RLL).

**Rice, William D.** MS '74 - Bill is now working with Wisconsin Electric's hydro power system --transferred from fly ash management. Notes great diversity of rocks in area, including Kimberlite (diamonds?) on company property. Barbara & Bill also have a new daughter born in April, 1983 named Kristin Charlotte.

**Rich, David** MS '77; PhD '80 - Dave is with SABINE Production Co. looking for oil and gas in the Powder River Basin, N.E. Wyoming. Dave writes that they have a son born in February, 1983, and a four year old named Jenny.

**Rosenshein, Joseph S.** PhD '67 - Joseph served on two GSA committees -- the Ad Hoc Committee for Meritorious Service Award and was a Section Meeting Representative.

**Saunders, Meg** BS '82 - Meg is working on Masters at Indiana University doing thesis work on a gold prospect in southwest Montana - hoped to have finished in 84.

**Schluger, Paul R.** PhD '72 - Paul is Exploration Manager - Frontier Division, Ocelot Oil Corp. in Denver.

**Schrodt, Joseph K.** MS '81; PhD '83 - Joe dropped by the Dept. May 1984. He and Christi like Dallas - they have a new home and a new daughter born November, 1983.

**Schwanetz, Marylinn (Nicholson)** BS '78; AB '81 - Marylinn is working with Gulf Oil Co., in Midland, TX and requests Illini help in repulsing the Texification of Gondwanaland. In so writing, she has inadvertantly revealed a change of name, probably relating to matrimony (RLL).

**Schwartz, Franklin W.** PhD '72 - In November 1984 at the GSA meeting in Reno, Frank Schwartz of the University of Edmonton and Leslie J. Smith of the University of British Columbia were the recipients of the 1984 O.E. Meinzer Award. The two scientists were recognized for their papers on stochastic modeling of mass transport



in ground water that were published in Water Resources Research. Frank was also the Birdsall Distinguished Lecturer at the GSA meeting. On the Birdsall Lecture Tour, Frank became acquainted with a variety of university programs operating in the United States and Canada. He said that one of the fringe benefits of the tour was an opportunity to "eat his way across North America."

**Scott, Alan Johnson** BS '55; PhD '58 - Via a phone call from Norbert Cygan to Pat Lane we learned that Alan has recently left the University of Texas to become President of Resources Planning International of Austin, Texas. (They provide geologic regional studies to oil exploration companies.)

**Seaber, Paul Robert** PhD '62 - Paul is a hydrologist for the USGS in Tallahassee, Florida. He was co-editor of the DNAG Hydrogeology Volume (mentioned in the 1984 GSA Annual Meeting Newsletter).

**Sharp, John M., Jr.** MS '74; PhD '74 - John served on the 1984 O.E. Meinzer Award Panel for the GSA meeting.

**Siegert, Rudolf B., Jr.** BS '56 - Via a phone call from Norbert Cygan to Pat Lane, we learned that Rudy is owner and president of an oil company in Slidell, Louisiana.

**Smith, Stephen Arnold** BS '70; (MS in Geology and Water Res. Mgmt. Univ. of Wisc.) - In January 1985, Stephen joined Dames and Moore, engineering and environmental consultants, as a senior hydrogeologist with the firm's Phoenix office. He'll coordinate ground-water investigations for the firm's hazardous waste projects in the Southwest. Stephen was formerly a senior geohydrologist with Salt River Project, supervising coal exploration projects and ground-water contamination and waste disposal studies for the utility's power plants. Before that he worked as a private consultant performing waste and water supply investigations for clients in the Southwest. He, his wife, Carolyn, and their four children live in Tempe, Arizona.

**Soeria-Atmadja, Rubini** PhD '63 - Rubini worked on the Hard Rock Petrology Project for Isle au thaut, Maine. He became a prof. in 1975 in the Dept. of Geology at the Institute of Technology at the Univ. of Bandung, Indonesia USAID. In 1983 he accompanied his son to the University of Wisconsin where he will be studying and made a side trip to Urbana to visit old friends in the department before going to Houston and then returning to Indonesia via San Francisco and Tokyo.

**Sohl, Norman F.** BS '49; MS '51; PhD '54 - Via a Christmas letter to the Whites, we learned that Norman and his wife took a trip to Spain in October.

**Stephenson, David A.** (BA, Augustana College, MS, Wash. St. Univ) PhD '65 - In September '84, David joined Dames & Moore, engineering and environmental consultants, as an associate with the firm's Phoenix office. He'll provide consultation on the hydrogeologic aspects of waste management as well as other water resources projects in the Intermountain Region. David has more than 20 years experience serving as a consultant on water-related projects to clients in industry and government and as a professor at the Univ. of Wisconsin. David currently serves on the U.S. National Committee for Scientific Hydrology, the coordinating group for U.S. contributions to international scientific and educational programs in UNESCO. He was recently appointed a member of the National Academy of Science Comm. on Evaluation of Programs for the Prevention of Ground-Water Contamination in the U.S., and also serves as an advisor to the Arizona Chamber of Commerce Comm. on Ground-Water Quality. He's a member of the GSA Hydrogeology Division Management Board and Vice-President of the U.S. Nat. Comm. of the Int. Assoc. of Hydrogeologists.

**Stieglitz, Ronald Dennis** MS '67; PhD '70 - Ronald is an Assoc. Professor at the University of Wisconsin at Green Bay. In 1983, he received the Founders Association Award for Excellence in Scholarship at the Univ. of Wisconsin-Green Bay. His research has dealt with the Paleozoic Stratigraphy, Ground Water, Kurst, and Post-Glacial history of Eastern Wisconsin.

**Textoris, Daniel Andrew** PhD '63 - "On January 1, 1983, I returned to full-time teaching and research after 12 years as half-time associate dean for research administra-



tion. Fall 83 finds me on Triassic silica oolites and opal-CT and chalcedony cemented quartz sandstone and procelanite." Dan is a professor of Geology at the University of North Carolina. His major teaching and research is in the specialties of sedimentary petrology, primarily with carbonates and silica.

**Threet, Richard Lowell** BS '47; BA '47; MA '49; PhD '52 - "After 6 years of teaching at the Univ. of Nebraska, 4 yrs. at the Univ. of Utah, and 19 yrs. at San Diego State Univ., together with nearly every summer's involvement with field camps of Ill., Ohio, and Utah, or with oil company consulting work, I decided to take early retirement and move to Anacortes, Washington. I did ease into retirement with two years of temporary part-time teaching at Western Washington Univ. in Bellingham from 80-82. In the little town of Anacortes (pop. 9,000) I keep fairly busy professionally with public service on engineering geology and hydrology. Dorrie and I now have four young grandchildren (all pre-school age) who occupy much of our energies during visits here and in Idaho and California. We look forward to visits from any of our old colleagues at Illinois; most of our familial ties with the Midwest have been severed, and there's little likelihood that we shall ever see any of you back there."

**Valenti, Gerard L.** BS '77 - Worked for Exxon Minerals in Caspe, Wyoming in 1977-78. Then he attended the Univ. of Wyoming from 78-80 and received his MS. From 1980 to the present, he's been working for Chevron USA in Denver doing photogeology. Gerry married Linda Meyer in 1977 and their first child (Shannon) was born in February 1983. He attended Dr. Wood's Great Britain Field Course during summer 1980. "I still claim to be the only U of I field camper to marry a Casper College nurse."

**Velbel, Danita Brandt** BS '78; (MS Univ. of Cincinnati) - As of January 84, Danita was a grad student finishing her dissertation at Yale University (in absentia). Her spouse (Michael) got a job as Assistant Prof. of Geology at Michigan State University. They moved to East Lansing in June 83, where Danita hoped to finish her PhD work and find a job in the Fall of 84 in Michigan.

**Wahl, Floyd M.** PhD '58 - Floyd was director of GSA Meeting in Reno, 1984 and attended the AAPG Alumni gathering in San Antonio, 1984.

**Wainwright, John E.** MS '57; PhD '59 - John had been working for Lockheed Aircraft in various places including Houston. He's now at Bethesda working on satellites.

**Whitaker, Sidney H.** PhD '65 - "Following 12 years with Saskatchewan Research Council in Exploration and Resource Evaluation (Groundwater and Coal), I spent 5 years in private consulting practice (primarily hydrogeology and coal evaluation)." In 1981, he accepted his present position as Senior Research Advisor, Applied Geoscience Branch, Whiteshell Nuclear Research Establishment in Manitoba.

**White, Owen L.** PhD '70 - Owen is chief engineer for the Ontario Geological Survey in the Engineering and Terrain Geology Section.

**Winar, Richard M.** BS '53; MS '55 - Richard is Vice President of Gustavson Associates, Geologists-Engineers in Boulder, Colorado. Thanks to Richard's concern that the Alumni should get together at AAPG in New Orleans, we discovered that our arrangements for a private room had gone astray. When we finally got it straight, he most kindly offered to help let people know we were gathering and was the first Alumni to sign in at the Alumni Cocktail Party in New Orleans. Thanks to his suggestions, we are going to try to get the word out to our Alumni to be sure to attend the get togethers we sponsor at GSA and AAPG.

**Wintsch, Susan (Wunder)** MS '74 - Susan is the Office Manager of the Clay Minerals Society in Bloomington, Indiana. She works as a free lance writer and is an instructor for a correspondence school in Illinois.

**Wobber, Frank J.** MS '61 - In 1976, Frank was appointed to the U.S. Congress Office of Technology Assessment where he was employed for five years. He conducted programs in minerals, coal resources and related public policy matters. He is currently with the Office of Energy Research, U.S. Department of Energy. He is manag-

ing research in geology and hydrology, related to nuclear and nonnuclear energy technologies. His major interests in basic research are related to subsurface transport of contaminants from solid wastes.

**Wolff, Roger Glen** MS '60; PhD '61 - In the summer of 83? or 84? Roger and his wife visited some hydrogeological sites on the northern foot of Caucasus in the Soviet Union, at the Black Sea coast and in Armenia. Also attended the Geological Congress in Moscow.

**Zanbak, Caner** PhD '78 - Caner is with Terraform Engineers Inc. at Naperville, IL.

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# IN MEMORY



JOHN HOWER - 1927-1983

### **Dr. John Hower**

John Hower, Head of the Geology Department at the University of Illinois from August 1978 to August, 1983, died on September 20, 1983.

John was born in Englewood, New Jersey and graduated sum cum laude from Syracuse University in 1952 after serving two years in the Navy. He received his Ph.D. from Washington University, St. Louis in 1955. John spent two years at the Amoco Research Center in Tulsa before joining the faculty at the University of Montana (1957-1965) and later Case Western Reserve University (1965-1976). In 1976 he was appointed as the director of the Geochemistry Program of the National Science Foundation.

Although he published and taught on a variety of subjects, John's great love was clay mineralogy. He was a brilliant theoretician and experimentalist. With his students and co-workers, he made substantial and lasting contributions to our understanding of the structural relations in clays of the illite-mixed layer illite/smectite group, and the nature of the reaction between smectite and illite that takes place with burial.

John was Vice President (1975-76) and then President (1976-77) of the Clay Minerals Society, an associate editor of *Clays and Clay Minerals* (1972-76) and the *Journal of Sedimentary Petrology* (1981-83). At the National Science Foundation, he sat on the Earth Science Review Panel (1981-83), the Earth Science Advisory Committee (1981-83) as well as the Director's Advisory Committee on Crustal Studies (1983) and the Ocean Margin Drilling Committee of the National Academy of Sciences (1980-82).

John became head of the geology department at a time of drastic budget cuts, sagging faculty morale and great uncertainty about the future of the University. It was a very difficult time to be Head. With great energy and perseverance, John fought many lonely battles to preserve the future of the department. Unfortunately, not all of us realized at the time how much he gave of himself or the price to be paid.

For many of us John was a true friend, a man of great wit and humor, a scientist of scintillating intellect with a deep love of language, music and literature. A restless intellectual, and romantic, he loved the ordered, elegant world of pure science and spirited, but friendly, discussion on any topic. At the end, however, there was a deep sadness in John that he could not overcome. He longed for a more ordered, happier world, filled with love and mutual respect, and never could quite understand much of the meanness and pettiness of the actual world. He was a gifted scientist and administrator who made a great difference to those whose lives he touched.



### **Dr. Francis P. Shepard**

Dr. Francis P. Shepard, was born on May 10, 1897, at Brookline, Massachusetts. He received his bachelor's degree in geology in 1919 from Harvard University and his doctoral degree in 1922 from the University of Chicago. He joined the faculty of the University of Illinois, Urbana, in 1922. Dr. Shepard began marine geology research at Scripps Institution in 1937, while still on the faculty of the University of Illinois. He returned to Scripps for part of each year until 1942 when he joined the University of California Division of War Research, assisting the Navy in the development of sonar communication and in the understanding of ocean currents. In 1945 he became a professor at Scripps Institution.

During 1951-57, Dr. Shepard was director of the American Petroleum Institute Project 51, an interdisciplinary geological study of the coastal waters of the Gulf of Mexico investigating the factors and conditions affecting the deposition of sedimentary formations. Dr. Shepard was frequently honored for his scientific accomplishments. He received the Geological Society of London's Wollaston Medal in 1966 and was the first recipient of the International Association of Sedimentologists' Sorby Medal for Excellence in Sedimentology in 1978. Most recently, he received the 1983 Lockheed Award for Ocean Science and Engineering from the Marine Technology Society. He was awarded honorary doctor of science degrees from Beloit College in Wisconsin and from the University of Southern California. The Society of Economic Paleontologists and Mineralogists designated a Francis P. Shepard Award for Excellence in Marine Geology in 1966.

Dr. Shepard was the first geologist to adopt marine geology as his primary scientific interest, and he wrote the first textbook in the field, *Submarine Geology*, published in 1948, which became the standard text for marine geology. He was the author of high school and college textbooks as well as the popular books, *The Earth Beneath the Sea* (1959) and *Geological Oceanography* (1977). He published more than 200 scientific papers during his career. He is truly recognized as "the father of marine geology."

Dr. Shepard was a fellow of the Geological Society of America, the American Association of Petroleum Geologists, the Seismological Society of America, the American Geophysical Union, the American Association for the Advancement of Science, the Netherlands Geological Society, and Sigma Xi. He held foreign membership in the Geological Society of London and honorary membership in the Natural History Society of Lausanne, Switzerland, and the Society of Economic Paleontologists and Mineralogists.

A philanthropist, Dr. Shepard assisted many educational and social institutions throughout the United States through the Francis P. Shepard Foundation. An avid photographer, bass player, and swimmer, Dr. Shepard had the opportunity in his lifetime to swim in all the world's oceans.



GEORGE W. WHITE - 1903-1985

## George W. White

The following Eulogies were given at the Memorial Service held for Dr. White on April 10, 1985 at the Community United Church, Champaign, Illinois on April 10, 1985.

"When George White died on February 20th, 1985, the University lost a distinguished scholar, educator, and administrator. The record of scholarship is very clear, more than 150 papers, bulletins, and books on glacial, economic, and engineering geology as well as the history of geology and six geological maps--a record of creativity that began in 1926 and lasted up to the day he died.

George came to the University of Illinois in 1947 where he began, over a period of 38 years, an unusually productive career as a scientist and a teacher and for 17 years the head of the department. Seventeen years as head -- I can say this with feeling -- is a true monument to his energy, his dedication, and his administrative skills. Evidence of his scholarship is also recorded by the numerous awards from his peers and the geological community: three honorary doctorate degrees; fellow and council member of the Geological Society of America; fellow and vice-president of the American Association for the Advancement of Science; honorary life member of the Ohio Academy of Science; and amongst many other honors one that George particularly treasured, a fellow of the Geological Society of London. In 1982 he was honored by the first award of the History of Geology division of the Geological Society of America, a division that he was instrumental in establishing. None of those honors and awards, impressive as they are, do not by themselves illuminate the humanity and spirit of the man.

In the last two years I enjoyed, perhaps more accurately was privileged to enjoy, numerous talks with George in the sun-filled room at the back of Mildred and George's house. What began as something of a duty in a crowded week, soon became a rare pleasure. They were talks that were filled with reminiscences of colleagues and friends spanning more than half a century, the history of the Geology Department and the campus, and other things. There were vivid stories of his trips to Russia, Britain, Scandinavia, Australia, and many many other parts of the world. And always discussion of new discoveries in geology, exciting new things to do and what remained to be done. There were also at times a considerable amount of talk concerning the cultivation and the constructive manipulation of deans, vice-chancellors, and even chancellors. But most of all they were talks filled with a great deal of vitality and enormous enthusiasm, a deep concern for his friends and colleagues, and a profound concern for his lifelong profession -- geology.

If it is true that George White passed away last February, it is also true that his legacy as a scientist, an educator, a historian, bibliophile, and many other things remain very much alive in the Geology Department, the University, and the worldwide community of geologists." --D. E. Anderson, Geology Dept. Head

"Professor George W. White passed away on Ash Wednesday, February 20, 1985. He was 81 years of age. Mildred has lost a husband, I have lost a mentor, we have lost a friend, the library has lost a founder, the university has lost a distinguished professor, and the science of geology has lost a pillar.

Most of us are fortunate if we can make some contribution in one or two fields of endeavor; maybe in a family and in an institution or a profession. George White was a maestro of many fields - Professor, Geologist, University Administrator,



Historian, Librarian, Author, Churchman and Familyman. We have just heard of George White's enormous contributions and international acclaim as a geologist, and in a minute we will hear of his contributions to literature and his building of a world class library. It is my pleasure, and it is a pleasure, to reflect on George White the Educator. As a Professor, he was the type specimen. His University teaching career spanned more than 50 years, beginning in 1925. During 15 years at the University of New Hampshire he moved through the ranks to become Dean of the Graduate School. He taught at Ohio State University for six years where he also headed the Ohio Geological Survey before moving to Illinois in 1947. This campus was, for George, the pinnacle. He arrived here to become the Head of what was then a small solid Department. Under his supervision, over a period of 18 years, the Department grew to be one of the largest and best graduate schools in geology in the United States. Along the way, three universities conferred honorary doctorates to Professor White. And during these years George supervised the graduate research work of dozens of students. Those Ph.D. recipients became part of his family; a very strong family.

Under George White, education began in the University classroom and continued, in his family, for a lifetime. He chose to see only the best in his students and he had an uncanny ability to identify and promote the strengths of each person he met. For his students, this identification of strengths was applied to rapid promotion in the classroom, a relentless pursuit for completion of degrees, and lifelong advice on career. George could fit people with opportunity.

George worked on the run. The old Departmental office in the Natural History Building had on the inner sanctum swinging half doors that opened in either direction. George would run out of that office leaving those doors flapping in the breeze. George loved the institution of the University, and he was a master of using the institution for the benefit of his Department, his science, and his students.

This same enthusiasm was applied to geological field work. George would be the first to climb the outcrop and would enthusiastically dig in the glacial deposits while lecturing on how even the sound of the mattock striking the earth could teach geology. As a maestro of so many fields of endeavor, he knew well when to make the transitions to his love of literature and love of churches. I worked as his geological field assistant in the middle 1960's. We were skampering in and out of coal mines and through highway construction projects in Ohio and Pennsylvania. George would arrange the day so that at noon we would just happen to arrive at a rural church yard where we could enjoy our sack lunch while sitting on the grass discussing churches and philosophy.

Our world may no longer permit the breath of expertise that we enjoyed in George White - Scientist, Historian, Librarian, Author, Professor and Friend.

He was a teacher who knew when to promote his students, a historian who looked to the future, a librarian who published, and a geologist who led an exciting science.

Today, we should not mourn for George White for his life was incredibly full; nor should we mourn for the loss of his presence in the University, the library, and this church for these institutions were strengthened greatly by his work; nor should we mourn for the irreplaceable loss of our teacher, professor and friend for we gained so much by his presence with us.

We should attempt to find in our lives some measure of his enthusiasm and optimism for this science, this university, this church, and this life." -- David L. Gross



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